Exhibit 8-3

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	·	anna (diantauthanna an) anna (diantauth) an	EDDS, EDO, IDO, DEDMENT
		screen) or touchscreen) same (display\$3 or console or screen\$3 or monitor\$3 or terminal) and scroll\$3 and (list or content or (instant adj messag\$3) or (phone adj number) or contact or label or folder or email or ringtone or name or bookmark) and (beyond or over) and (terminus or edge) and detect\$3 and direct\$3 and motion and ((portable or handheld or hand-held or (hand adj held)) near device)	FPRS; EPU; JPU; DERWENT
S15	391	(touch\$3 or touch-screen or (touch adj screen) or touchscreen) near (display\$3 or console or screen\$3 or monitor\$3 or terminal) and scroll\$3 and (list or content or (instant adj messag\$3) or (phone adj number) or contact or label or folder or email or ringtone or name or bookmark) and (beyond or over) and (terminus or edge) and detect\$3 and direct\$3 and motion and ((portable or handheld or hand-held or (hand adj held)) near device)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S16	259	(touch\$3 or touch-screen or (touch adj screen) or touchscreen) near (display\$3 or console or screen\$3 or monitor\$3 or terminal) and scroll\$3 same (list or content or (instant adj messag\$3) or (phone adj number) or contact or label or folder or email or ringtone or name or bookmark) and (beyond or over) and (terminus or edge) and detect\$3 and direct\$3 and motion and ((portable or handheld or hand-held or (hand adj held)) near device)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S17	1090308	(electronic or presentation or email or word or spreadsheet or (web adj page) or (digital adj image)) and (mov\$3 or movement) and (edge or end or terminus or boundar\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S18	233	S17 and ((touch\$3 or touch-screen or (touch adj screen)) same (display\$3 or console or screen\$3 or monitor\$3 or terminal) same (device near (portable or hand-held))) and (object or finger or pen) and direction and speed\$3 and detect\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S19	48	S16 and S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO: DERWENT
S20	211	S16 not S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S21	43438	(touch\$3 or touch-screen or (touch adj screen)) and (display\$3 or console or screen\$3 or monitor\$3 or terminal) and (beyond or past or outside) and (edge or terminus or border or boundar\$3) and (rotat\$4 or zoom\$3 or scroll\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S22	2848	(touch\$3 or touch-screen or (touch adj screen)) and (display\$3 or console or screen\$3 or monitor\$3 or terminal) and	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT

S23	1275	(beyond or past or outside) and (edge or terminus or border or boundar\$3 or end\$3) and (rotat\$4 or zoom\$3 or scroll\$3) and (portable or handheld or hand-held) and (GUI or (graphic\$2 adj user adj interface)) and detect\$3 ((touch\$3 or touch-screen or (touch adi	US-PGPUB; USPAT; USOCR:
		screen)) near (display\$3 or console or screen\$3 or monitor\$3 or terminal)) and (beyond or past or outside) and (edge or terminus or border or boundar\$3 or end\$3) and (rotat\$4 or zoom\$3 or scroll\$3) and (portable or handheld or hand-held) and (GUI or (graphic\$2 adj user adj interface)) and detect\$3 and (finger or object) and memory and (CPU or (central adj process\$3 adj unit) or processor or microprocessor)	FPRS; EPO; JPO; DERWENT
S24	75	((touch\$3 or touch-screen or (touch adj screen)) near (display\$3 or console or screen\$3 or monitor\$3 or terminal)) and (beyond or past or outside) and (edge or terminus or border or boundar\$3 or end\$3) and (rotat\$4 or zoom\$3 or scroll\$3) and (portable or handheld or hand-held) and (GUI or (graphic\$2 adj user adj interface)) and detect\$3 and (finger or object) and memory and (CPU or (central adj process\$3 adj unit) or processor or microprocessor) and (list or (web adj page) or (word adj processing) or (digital adj image) or spreadsheet or email) and (friction or motion) and speed\$3 and (magnif\$7 or multi-finger or (multi adj finger)) and correspond\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S25	0	"345".ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S26	86830	"345"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S27	152	S23 and S26	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S28	46	S27 and 345/173.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S29	1	S27 and 345/684.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT
S30	30465	"715"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO: DERWENT
S31	173	S23 and S30	US-PGPUB; USPAT; USOCR; FPRS: EPO: JPO: DERWENT
S32	3	S31 and 715/784.ccls.	US-PGPUB; USPAT; USOCR; FPRS: FPO: JPO: DERWENT
S33	5	S31 and 715/864.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO: JPO: DERWENT
S34	21	S31 and 715/863.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO: DERWENT
S35	0	S31 and 715/785.ccls.	US-PGPUB; USPAT; USOCR;

			FPRS; EPO; JPO; DERWENT
S36	797	S26 and 345/660.ccls.	US-PGPUB; USPAT; USOCR;
			FPRS: EPO; JPO; DERWENT
S37	4	S27 and 345/660.ccls.	US-PGPUB: USPAT: USOCR:
ļ			FPRS; EPO; JPO; DERWENT
S38	0	"455"/\$.ccls	US-PGPUB: USPAT: USOCR:
			FPRS: EPO: JPO: DERWENT
S39	124548	"455"/\$.ccls.	US-PGPUB: USPAT: USOCR:
			FPRS; EPO; JPO; DERWENT
S40	61	S23 and S39	US-PGPUB: USPAT: USOCR:
		-	FPRS: EPO; JPO: DERWENT
S41	0	S40 and 455/169.ccls.	US-PGPUB: USPAT: USOCR:
			FPRS; EPO; JPO; DERWENT
S42	0	((touch\$3 or touch-screen or (touch adj	US-PGPUB; USPAT; USOCR;
		screen)) near (display\$3 or console or	FPRS: EPO; JPO; DERWENT
		screen\$3 or monitor\$3 or terminal)) and	
		(beyond or past or outside) and (edge or	
		terminus or border or boundar\$3 or	
		end\$3) and (portable or handheld or	
		hand-held) and (GUI or (graphic\$2 adj	
l		user adj interface)) and detect\$3 and	
		(finger or object) and memory and (CPU	
		or (central adj process\$3 adj unit) or	
		processor or microprocessor) and	
		rotat\$4 and ((multi adj finger) or	
		multifinger or multi-finger) and	
		corespond\$3 and degree and predefined	
		and angle	
S43	0	((touch\$3 or touch-screen or (touch adj	US-PGPUB; USPAT; USOCR;
		screen)) near3 (display\$3 or console or	FPRS; EPO; JPO; DERWENT
		screen\$3 or monitor\$3 or terminal) near3	
		(portable or handheld or hand-held)) and	
		(GUI or (graphic\$2 adj user adj interface))	
		and detect\$3 and (finger or object) and	
		memory and (CPU or (central adj	
		process\$3 adj unit) or processor or	
		microprocessor) and rotat\$4 and ((multi	
		adj finger) or multifinger or multi-finger)	
-		and corespond\$3 and degree and	
		predefined and angle	
S44	1	((touch\$3 or touch-screen or (touch adj	US-PGPUB; USPAT; USOCR;
		screen)) same (display\$3 or console or	FPRS; EPO; JPO; DERWENT
		screen\$3 or monitor\$3 or terminal) same	
	1	(portable or handheld or hand-held)) and	
		(GUI or (graphic\$2 adj user adj interface))	
		and detect\$3 and (finger or object) and	
		memory and (CPU or (central adj	
		process\$3 adj unit) or processor or	
		microprocessor) and rotat\$4 and ((multi	
		adj finger) or multifinger or multi-finger)	
		and degree and predefined	

Date Conducted: July 20, 2007.

2) Database Service: MicroPatent

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Files Searched:

US Patent Document Databases: USG USA Foreign Patent Document Databases: EPA EPB WO JP DEG DEA DET DEU GBA FRA

Search Logic:

#	results	criteria	
56	135 hits	Combined query	44 not 45
55	69 hits	Combined query	(54 or 53) not (51 or 49)
		Any Classification	G06F000348 or G06F000301
		Full patent spec.	stylus*2 same (touch*3 same (screen*3 or display*3))
54	223 hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	
		Any Classification	715764 or 715702 or 715781 or 715788 or 715831
		Full patent spec.	stylus*2 same (touch*3 same (screen*3 or display*3))
53	178 hits	Priority Date (earliest)	<=20070628
1		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
an ar an	and a second	Years	
		Full patent spec.	stylus*2 same (touch*3 same (screen*3 or display*3))
52	16957 hits	Priority Date (earliest)	
		Databases	USG USA EPA EPB WU JP DEG DEA DET DEU GBA FRA
		Lais Any Classification	
		Full natent spec	GUOFUUU348 OF GUOFUUU301 stylus*2 with (touch*3 adi3 (screen*3 or display*3))
		Priority Date (earliest)	<=20070628
51	152 hits		USG USA EPA EPB WO JP DEG DEA DET DEU GBA
		Databases	FRA
		Years	1836-2008
		Any Classification	G06F000348 or G06F000301
		Full patent spec.	stylus*2 with (screen*3 or display*3)
50	601 hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
	u fariaren en anternetaria	Years	1836-2008
40		Any Classification	715764 or 715702 or 715781 or 715788 or 715831
	255 bito	Full patent spec.	stylus*2 with (screen*3 or display*3)
43	200 mts	Priority Date (earliest)	
	-	Databases	FRA

		Years	1836-2008
		Claims, Title or Abstract	(stylus*2 with (touch*3 adj3 (screen*3 or display*3))) and (scroll*3 or rotat*5 or zoom*3)
40	110 hito	Priority Date (earliest)	<=20070628
40	110 mus	Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2008
		Full patent spec.	(stylus*2 near3 (touch*3 adj3 (screen*3 or display*3))) same (scroll*3 or rotat*5 or zoom*3)
47	197 hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
Normal Bull Schulstones	toruraemaan Will Oddala an	Years	1836-2008
		Full patent spec.	(stylus*2 with (touch*3 adj3 (screen*3 or display*3))) same (scroll*3 or rotat*5 or zoom*3)
46	601 hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2008
	86 hits	Full patent spec.	stylus*2 near3 (touch*3 adj3 (screen*3 or display*3)) and (scroll*3 and rotat*5 and zoom*3) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus)
45		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2008
	221 hits	Full patent spec.	stylus*2 with (touch*3 adj3 (screen*3 or display*3)) and (scroll*3 and rotat*5 and zoom*3) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus)
44		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
	n anto nan gang Kalau Kari ta kata kata pang kari	Years	1836-2008
	And Andrew And Andrew	Full patent spec.	stylus*2 with (touch*3 adj3 (screen*3 or display*3)) and (scroll*3 or rotat*5 or zoom*3) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus)
43	2986 hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
	North Development with security species a sec	Years	1836-2008
		Full patent spec.	stylus*2 with (touch*3 adj3 (screen*3 or display*3)) and (scroll*3 or rotat*5 or zoom*3)
42	5260 hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
			1836-2008
41	49 hits	Combined query	37 not 38

40	98 hits	Combined query	39 not 38
	na an mar a channa an fhair a' fhài r fheann ann an fhair	Any Classification	G06F000348 or G06F000301
20	102 hita	Full patent spec.	stylus*2 with (touch*3 adj3 (screen*3 or display*3)) and (scroll*3 or rotat*5 or zoom*3)
29	105 1118	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
an a		Years	1836-2008
		Any Classification	715764 or 715702 or 715781 or 715788 or 715831
		Full patent spec.	stylus*2 with (touch*3 adj3 (screen*3 or display*3)) and (scroll*3 or rotat*5 or zoom*3)
38	76 hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2008
		Any Classification	715764 or 715702 or 715781 or 715788 or 715831
		Full patent spec.	stylus*2 with (touch*3 adj3 (screen*3 or display*3))
37	125 hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
time and the second second	n Baugh (1999) Should Change (1999) Should Change (1999)	Years	1836-2008
		Priority Date (earliest)	<=20070628
36	69 hits	litle or Abstract	stylus ² 2 near3 (touch ³ 3 adj3 (screen ³ 3 or display ³ 3))
50		Databases	FRA
		Years	1836-2008
	ang 1976, ang	Claims, Title or Abstract	stylus*2 near3 (touch*3 adj3 (screen*3 or display*3))
35	250 hits	Priority Date (earliest)	<=20070628
00		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
	lamenness XXXIIIXiiiiiimmeness		1836-2008 ###################################
34		Full patent spec.	stylus*2 near3 (touch*3 adj3 (screen*3 or display*3))
	4664 hits	Priority Date (earliest)	
		Databases Years	1836-2008
	er branssentin og i reskipskovi	Full patent spec.	stylus*2 with (touch*3 adj3 (screen*3 or displav*3))
33	400001.1	Priority Date (earliest)	<=20070628
	12929 hits	Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2008

Date Conducted: March 7, 2008.

#	results	criteria
32	12 hite	Full patent spec (touch*3 or touch-screen or (touch adj screen)) or
JE	I I 4 III 3	display*3 or console*1 or screen*3 or monitor*3 or

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Contraction and the second sec	and account of the second s	an a	
			terminal*1) or (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) or (beyond or outside or past) or (edge*1 or boundar*3 or end*1 or terminus)
and the manufacture of the second		Patent/Publication No.	US6975306 or US20070157094 or US20070156364 or US20070155434 or US20070152984 or US20070152980 or US20070150842 or US20070155369 or US20070152979 or US20070152978 or US20070150826 or US20060238495
		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
	3 hits	Full patent spec.	(touch*3 or touch-screen or (touch adj screen)) or (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) or (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) or (beyond or outside or past) or (edge*1 or boundar*3 or end*1 or terminus)
		Patent/Publication No.	US20070146337 or US20070150830 or US20070132789
		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
nilisetteen influen van		Years	1836-2007
		Any Classification	G06F000341 or G06F000333 or G09G000500
יז ייש שוני איש או איש	303 hits	Full patent spec.	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus)
		Priority Date (earliest)	<=20070628
2000 U 000 U 00	Y C ACCESSION	Databases	EPA EPB WO JP DEG DEA DET DEU GBA FRA
	for function of the second	Years	1836-2007
29	49 hits	Any Classification	345660

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		Full patent spec.	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus)
		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
		Any Classification	345660
28	17 hits	Full patent spec.	(touch*3 or touch-screen or (touch adj screen)) and ((display*3 or console*1 or screen*3 or monitor*3 or terminal*1) same (beyond or outside or past)) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and ((beyond or outside or past) same (edge*1 or boundar*3 or end*1 or terminus))
	1 Martin Contraction	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
27	186 hits	Combined query	26 not (8 or 15 or 18 or 19 or 22 or 25)
		Any Classification	715864 or 715785 or 715784 or 715863
26	202 hits	Full patent spec.	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus)
		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
25	125 hits	Combined query	24 not (8 or 15 or 18 or 19 or 22)
r		Any Classification	3/5173 or 3/568/

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	and a second		(touch*3 or touch scroop or (touch adj scroop)) and
en bezen bezen en e		Full patent spec. Priority Date (earliest)	((display*3 or console*1 or screen*3 or monitor*3 or terminal*1) same (beyond or outside or past)) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and ((beyond or outside or past) same (edge*1 or boundar*3 or end*1 or terminus)) <=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
		Any Classification	345173 or 345684
10000000000000000000000000000000000000	589 hits	Full patent spec.	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus)
		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
22	27 hits	Combined query	
		Any Classification	345
	27 hits	Claims, Title or Abstract	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus)
		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
Burnto montesta	CHIRADON AND POST TROUBLY ALSO	Years	1836-2007
		Any Classification	345
20	4098 hits	Full patent spec.	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email

			adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus)
111111111111111111111111111111111111111		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
19	2 hits	Combined query	16 and 1
18	16 hits	Combined query	16 and 17
		Priority Date (earliest)	<=20070628
	16 hits	Title or Abstract	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and (mov*3 or movement) and (edge*1 or boundar*3 or end*1 or terminus)
		Databases	1836 2007
	69611 hits	Full patent spec. Priority Date (earliest) Databases Years	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) and (scroll*3 or rotat*5 or zoom*3) and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1 or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1 or (electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and (beyond or outside or past) and (edge*1 or boundar*3 or end*1 or terminus) <=20070628 USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA 1836-2007
15	282 hits	Combined query	14 not (8 or 12)
14	364 hits	Combined query	11 and 5
13	352 hits	Combined query	12 not 8
12	359 hits	Full patent spec.	(((touch*3 or touch-screen or (touch adj screen)) near (display*3 or console*1 or screen*3 or monitor*3 or terminal*1)) same ((portable or hand-held) near device*1)) and detect*3 and (mov*3 or movement or scroll*3) and (list*3 or electronic or presentation or spreadsheet*1 or word or email or web or image*1) and direct*3 and (beyond or behind or after) and (edge*1 or boundar*3 or end*1 or terminus) and (object*1 or finger*1)
	1000 100 100 100 100 100 100 100 100 10	Priority Date (earliest)	<=20070628

P4304US1/63266-5054US

	and and a second se	Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
	979 hits	Full patent spec. Priority Date (earliest)	(((touch*3 or touch-screen or (touch adj screen)) same (display*3 or console*1 or screen*3 or monitor*3 or terminal*1)) same ((portable or hand-held) same device*1)) and detect*3 and (mov*3 or movement or scroll*3) and (list*3 or electronic or presentation or spreadsheet*1 or word or email or web or image*1) and direct*3 and (beyond or behind or after) and (edge*1 or boundar*3 or end*1 or terminus) and (object*1 or finger*1) and translat*3 <=20070628
4		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
	-	Years	1836-2007
	12774 hits	Full patent spec.	((touch*3 or touch-screen or (touch adj screen)) same (display*3 or console*1 or screen*3 or monitor*3 or terminal*1)) and ((portable or hand-held) same device*1) and detect*3 and (mov*3 or movement or scroll*3) and (list*3 or electronic or presentation or spreadsheet*1 or word or email or web or image*1) and direct*3 and (beyond or behind or after) and (edge*1 or boundar*3 or end*1 or terminus) and (object*1 or finger*1)
		Priority Date (earliest)	<=20070628
n		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
	22644 hits	Full patent spec.	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1) and detect*3 and (mov*3 or movement) and (electronic or presentation or spreadsheet*1 or word or email or web or image*1) and direct*3 and (beyond or behind or after) and (edge*1 or boundar*3 or end*1) and (portable or hand-held) and (object*1 or finger*1)
		Priority Date (earliest)	<=20070628
44 True 1 True 1		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
2 	Conservation (Construction of the second	Years	1836-2007
8	349 hits	Combined query	3 and 4 and 5 and 6 and 7
		Full patent spec.	(zoom*3 or zoom-in or (zoom adj in) or zoom-out or (zoom adj out) or scal*3) and magnificat*4
7	82991 hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
Sec. 2. 11. 188.2	normanian Azaran azyghoun	Years	1836-2007
		Full patent spec.	rotat*3 and degree*1
6	1468197 hits	Priority Date (earliest)	
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
5	53592 hits	Full patent spec.	scroll*3 and (list*1 or content*1 or (instant adj messag*3) or (phone adj number*1) or (contact adj information) or label*1

			or folder*1 or (email adj (message*1 or address*2)) or (physical adj address*2) or ringtone*1 or name*1 or bookmark*1) and (edge*1 or boundar*3 or end*1)
200 Jahong 10		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
4	845382	Full patent spec.	(mov*3 or movement) and ((electronic or presentation) or word or spreadsheet or email or (web adj page*1) or (digital adj image*1)) and (edge*1 or boundar*3 or end*1 or terminus)
т 	hits	Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
	379044 hits	Full patent spec.	(touch*3 or touch-screen or (touch adj screen)) and (display*3 or console*1 or screen*3 or monitor*3 or terminal*1)
3		Priority Date (earliest)	<=20070628
		Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
		PCT Application Number	WO2006US61333*
2	no hits	Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
		Years	1836-2007
8		Patent/Publication No.	US5495566 or US6690387
AT JOAN NEW		Priority Date (earliest)	<=20070628
1	2 hits	Databases	USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA
line Antone Marcana and Antone Marcana	j	Years	

Date Conducted: July 20, 2007.

3) Database Service: PatBase

Files Searched:

US Patent Document Databases: USG USA Foreign Patent Document Databases: EPA EPB WO JP DEG DEA DET DEU GBA FRA

Search Logic:

Search history

Search ((PN=(US5495566 or US6690387)) and (PRD<20070628)) (results 2) 1:

Search PN=(EP1758013 OR USD541801 OR US5850211 OR WO9957630 OR US5526023 OR US5864330 OR US6384845 OR US5075673 OR US4954967) (Results 9) 2:

Search PN=(EP0880091 OR EP0952721 OR EP1679580 OR US5611060 OR US5726687 OR 3: US5732228 OR US5757368 OR US5774109 OR US5801696 OR US5848246 OR US5867158 OR US5872566 OR US5874936 OR US5896132 OR US5914716 OR US5936618 OR US5952995 OR US5963191 OR US5987245 OR US5995079 OR US5999972 OR US6016110 OR US6038590 OR US6067069 OR US6075533 OR US6078306 OR US6097387 OR US6128012 OR US6208343 OR US6211879 OR US6222528 OR US6266709 OR US6272555 OR US6304893 OR US6337694 OR US6339438 OR US6424991 OR US6434598 OR US6526435 OR US6538665 OR US6571390 OR US6628996 OR US6721953 OR US6738045 OR US6750850 OR US6781571 OR US6832084 OR US6850256 OR US6865718 OR US6899273 OR US6920619 OR US6972776 OR US6978127 OR US6989819 OR US7046230 OR US7065785 OR US7071919 OR US7084856 OR US7091964 OR US7111240 OR US7119792 OR US7168047 OR US7170491 OR US7173637 OR US7180431 OR US7233318 OR WO0042497 OR US4794386 OR US5196838 OR US5313229 OR US5374942) (Results 62)

Search 1 or 2 or 3 (Results 73)

4:

Search ((PN=(US4954967 or WO9957630)) and (PRD<20070628)) (results 2) 5:

- Search PN=(EP0730761 OR EP0767991 OR EP0880091 OR EP0938040 OR JP3122905 OR JP4076130 OR JP7034199 OR JP7086879 OR US5206949 OR US5426732 OR US5598524 OR 6: US5621878 OR US5666552 OR US5739744 OR US5754178 OR US5825349 OR US5825617 OR US5889236 OR US5911067 OR US5936618 OR US5969705 OR US6028271 OR US6037937 OR US6084569 OR US6088024 OR US6215475 OR US6239389 OR US6266045 OR US6271829 OR US6310610 OR US6331863 OR US6340979 OR US6380931 OR US6388659 OR US6414671 OR US6535930 OR US6610936 OR US6686927 OR US6750852 OR US6807668 OR US6894680 OR US7109978 OR US7119797 OR US7184064 OR WO03060622 OR WO9418646 OR WO9607148 OR WO9633556 OR WO9928813 OR EP0150904 OR JP37029251 OR JP50098096 OR US3729129 OR US4071691 OR US4122438 OR US4221975 OR US4302011 OR US4365243 OR US4413314 OR US4421418 OR US4495651 OR US4504920 OR US4529968 OR US4561049 OR US4565999 OR US4566001 OR US4567480 OR US4578674 OR US4586035 OR US4758830) (Results 57)
- Search PN=(US6310606 OR US6344791 OR US6404584 OR US6415707 OR US6456778 OR 7: US6469691 OR US6470078 OR US6496449 OR US6504527 OR US6518953 OR US6529185 OR US6532000 OR US6538638 OR US6559831 OR US6563415 OR US6906700 OR US7184064 OR WO0145123 OR WO0169369 OR WO02090918 OR WO03060622 OR EP0565253 OR EP0707258 OR EP0813138 OR WO9718508) (Results 24)
- Search
- 8:

4 or 5 or 6 or 7 (Results 148)

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9: Search PN=(AU761413 OR EP0816987 OR EP0816990 OR EP0913986 OR EP1096362 OR EP1637994 OR GB2333215 OR GB2377605 OR GB2377606 OR NL1007407 OR US5601432 10: OR US5615347 OR US5649132 OR US5686937 OR US5721906 OR US5724492 OR US5745713 OR US5745909 OR US5764873 OR US5765168 OR US5777616 OR US5819225 OR US5825356 OR US5825360 OR US5828374 OR US5838927 OR US5859637 OR US5859638 OR US5862220 OR US5862339 OR US5872924 OR US5877763 OR US5879162 OR US5890905 OR US5896444 OR US5898433 OR US5900872 OR US5914723 OR US5918013 OR US5920304 OR US5923325 OR US5936623 OR US5936624 OR US5959626 OR US5963950 OR US5982365 OR US5986639 OR US5990862 OR US5999176 OR US5999177 OR US5999903 OR US6018345 OR US6025841 OR US6034689 OR US6037944

OR US6052130 OR US6054996 OR US6067085 OR US6073168 OR US6081256 OR

P4304US1/63266-5054US

US6097386 OR US6115646 OR US6133911 OR US6133913 OR US6134019 OR US6169546 OR US6173296 OR US6175363 OR US6184883 OR US6191785 OR US6191790 OR US6208342 OR US6215490 OR US6215901 OR US6216141 OR US6220743 OR US6236400 OR US6249284 OR US6253326 OR US6259445 OR US6278773 OR US6288718 OR US6297822 OR US6300950 OR US6307574 OR US6308221 OR US6311197 OR US6313823 OR US6314426 OR US6317316 OR US6326985 OR US6332157 OR US6335740 OR US6340977 OR US6343318 OR US6366697 OR US6369833 OR US6388686 OR US6389386 OR US6397259 OR US6404441 OR US6404443 OR US6421065 OR US6437803 OR US6448988 OR US6456303 OR US6460015 OR US6467081 OR US6476831 OR US6489975 OR US6496205 OR US6496844 OR US6496868 OR US6499101 OR US6502233 OR US6505232 OR US6526502 OR US6538667 OR US6539407 OR US6539499 OR US6546481 OR US6556431 OR US6560726 OR US6563698 OR US6564220 OR US6567549 OR US6573906 OR US6574615 OR US6577329 OR US6584496 OR US6587121 OR US6587886 OR US6590588 OR US6598223 OR US6606716 OR US6614890 OR US6628310 OR US6628311 OR US6633885 OR US6647421 OR US6654035 OR US6657645 OR US6662218 OR US6683626 OR US6686925 OR US6704033 OR US6724401 OR US6731309 OR US6738787 OR US6760708 OR US6798918 OR US6812938 OR US6816859 OR US6831666 OR US6845369 OR US6850259 OR US6867790 OR US6874123 OR US6874143 OR US6876463 OR US6883168 OR US6891553 OR US6912552 OR US6915490 OR US6920445 OR US6920612 OR US6950991 OR US6954905 OR US6957260 OR US6966038 OR US6996561 OR US6996784 OR US7000187 OR US7000230 OR US7007240 OR US7024626 OR US7024658 OR US7025209 OR US7039868 OR US7046254 OR US7047498 OR US7058905 OR US7062711 OR US7092580 OR US7099876 OR US7107545 OR US7114130 OR US7117435 OR US7117479 OR US7120641 OR US7120866 OR US7120880 OR US7127525 OR US7127527 OR US7127704 OR US7142890 OR US7152213 OR US7155667 OR US7168035 OR US7191394 OR US7193163 OR US7197515 OR US7210093 OR US7216300 OR USD422982 OR USD423485 OR USD424037 OR USD424543 OR USD426207 OR USD426525 OR USD427576 OR USD427607 OR USD427980 OR USD428398 OR USD430885 OR USD431038 OR USD432544 OR USD442185 OR USD443597 OR USD445427 OR USD453937 OR USD461821 OR USD467935 OR USD469444 OR USD490440 OR WO0026760 OR WO0068769 OR WO02061561 OR WO0217292 OR WO03029952 OR WO07054563 OR US4648062 OR US4939507 OR US5488685 OR US5479600 OR US4931783 OR EP0428261 OR US5155806 OR US4772882 OR US5287448 OR US32632 OR US4622545 OR US5550969 OR US5481667 OR US5510808 OR US5600779 OR US4689737 OR US5050105 OR US4899377 OR US5339391 OR US4975690 OR US5157768 OR US4884223 OR US4748618 OR US5095448 OR EP0325443 OR WO9298284 OR US5602996 OR US4847604 OR US5532715 OR WO9208184 OR US5062060 OR US5469540 OR FR2693810 OR US4831556 OR US4789962 OR US5072412 OR US4992972 OR US4533910 OR US4812834 OR US5157763 OR US4785408 OR US4935865 OR US4890098 OR US5039937 OR EP0342964 OR US5179654 OR US4939508 OR US5226117 OR USRE32632 OR US4899136 OR US4555775 OR US5148154 OR US4961070 OR US4914732 OR EP0239884) (Results 227)

Search PN=(WO0060854 OR DE3047597 OR DE3431702 OR US5263174 OR US5357276 OR 11: WO9532587) (Results 6)

 Search
 PN≈(AU637180 OR EP0438291 OR EP0453840 OR EP0740258 OR GB2290208 OR
 GB2290209 OR US5469540 OR US5488685 OR US5550967 OR US5600779 OR US5602996
 OR US5825355 OR US5828374 OR US5859638 OR WO9417469 OR GB2187580 OR
 JP60019227 OR JP62004953 OR JP62061166 OR JP62115519) (Results 12)

Search 13: 8 or 9 or 10 or 11 or 12 (Results 393)

Search (touch or touchscreen or touch-screen or (touch w1 screen)) and (beyond or past or outside) and 14: (display or console or screen or monitor or terminal) and (edge* or border* or frame* or boundar* or end*) and (scroll* or rotat* or zoom*) (Results 30704)

Search 14 and 13 (Results 49) 15:

Search 14 and (portable or handheld or hand-held) (Results 9780) 16:

Search (touch* or touchscreen or touch-screen or (touch w1 screen)) and (beyond or past or outside) and (display or console or screen or monitor or terminal) and (edge* or border* or frame* or boundar* 17: or end*) and (scroll* or rotat* or zoom*) (Results 45475)

Search (UC=(345)) (Results 59323) 18:

Search 18 and 17 (Results 3486) 19:

Search (UC=(345/173)) (Results 2899) 20:

Search 20 and 17 (Results 498) 21:

Search (touch* or touchscreen or touch-screen or (touch w1 screen)) and ((beyond or past or outside) 22: near (display or console or screen or monitor or terminal)) or ((beyond or past or outside) near (edge* or border* or frame* or boundar* or end* or terminus)) and (scroll* or rotat* or zoom*) (Results 22681)

Search 22 and 20 (Results 194)

23:

Search (UC=(345/684)) (Results 239) 24:

Search 22 and 24 (Results 19)

25:

Search 23 or 25 (Results 209) 26:

Search 26 and (list* or content* or (instant w1 messag*) or (phone adj number*) or (contact w1 27: information) or label* or folder* or (email w1 (message* or address*)) or (physical w1 address*) or ringtone* or name* or bookmark* or (electronic or presentation) or word or spreadsheet or email or (web w1 page*) or (digital w1 image*1)) (Results 199)

Search 27 and 1 (Results 2) 28:

Search (UC=(345/660)) (Results 701) 29:

Search 29 and 22 (Results 29) 30:

Search (UC=(715/864 or 715/785 or 715/784 or 715/863)) (Results 794) 31:

Search 31 and 22 (Results 77)

32:

Search (IC=(G06F3/033)) (Results 36179) 33:

Search ((TAC=((touch* or touchscreen or touch-screen) and (display or monitor or screen) and (scroll* or rotat* or zoom*) and (edge* or boundar* or end* or terminus) and (beyond or 34: past or outside))) and (IC=(G06F3/033))) (Results 85)

Search ((TAC=((touch* or touchscreen or touch-screen) and (display or monitor or screen) and 35: (scroll* or rotat* or zoom*) and (edge* or boundar* or end* or terminus) and (beyond or

past or outside))) and (IC=(G09G5/00))) (Results 90)

Search ((TAC=((touch* or touchscreen or touch-screen) and (display or monitor or screen) and 36: (scroll* or rotat* or zoom*) and (edge* or boundar* or end* or terminus) and (beyond or past or outside))) and (IC=(G06F3/041))) (Results 24)

Date Conducted:	July 20, 2007.
4) Database Service:	DialogPRO: Derwent World Patent Index (DWPI) Abstracts
File Searched:	(Non Patent Literature)

Search Logic:

Hits	Search String
7	touch? and (display? or screen?) and (scroll? or rotat? or zoom?) and beyond and (edge? or end? or boundar?)
0	touch? and (display? or screen?) and rotat? and multifinger? and degree?
36641	touch? and (display? or screen?) and zoom? and beyond or (edge? or end? or boundar?) and portable
5	touch? and (display? or screen?) and zoom? and beyond or (edge? or boundar?) and portable and finger? and magnif?
7	touch? and (display? or screen?) and scroll? and beyond or (edge? or boundar?) and portable and finger? and list?
10	touch? and (display? or screen?) and rotat? and finger? and degree?

Date Conducted: July 20, 2007.

5) Database Service: DialogPRO: Technical Literature Search

File Searched: (Non Patent Literature)

Search Logic:

Hits	Search String
84	touch? and (display? or screen?) and (scroll? or rotat? or zoom?)
7	touch? and (display? or screen?) and (scroll? or rotat? or zoom?) and (edge? or end? or boundar?)
0	touch? and (display? or screen?) and (scroll? or rotat? or zoom?) and beyond and (edge? or end? or boundar?)
0	touch? and (display? or screen?) and rotat? and finger? and degree?

Date Conducted: July 20, 2007.

6) Database Service: IP.com: Technical Literature Search

File Searched: (Non Patent Literature)

Search Logic:

Hits	Search String
85	touch* and (display* or screen*) and (scroll* or rotat* or zoom*) and detect* and (beyond or outside) and (edge* or end* or boundar*)
0	touch* and (display* or screen*) and rotat* and detect* and multifinger* and degree*
0	touch* and (display* or screen*) and rotat* and detect* and multifinger*
22	touch* and (display* or screen*) and rotat* and detect* and finger* and degree*
14	touch* and (display* or screen*) and zoom* and detect* and beyond and (edge* or end* or boundar*)
6	touch* and (display* or screen*) and (zoom* or scroll*) and detect* and beyond and (edge* or end* or boundar*) and portable

Date Conducted: July 20, 2007.

7) Database Service: IEEE Xplore (Institute of Electrical and Electronics Engineers, Inc.): Technical Literature Search

File Searched: (Non Patent Literature)

Search Logic:

Hits	Search String
0	((touch and display and screen and beyond and (edge or boundary or end) and (zoom or scroll) and portable) <in>metadata)</in>
0	((touch and display and screen and (edge or boundary or end) and (zoom or scroll) and portable) <in>metadata)</in>
5	((touch and display and screen and (edge or boundary or end)) <in>metadata)</in>
18	((touch and screen and (edge or boundary or end)) <in>metadata)</in>
36	((touch and screen and (edge or boundary or end or beyond or corner or over or periphery)) <in>metadata)</in>
24	((touch and screen and (port* or handh*)) <in>metadata)</in>
0	((touch and display and screen and rotation and fingers) <in>metadata)</in>
0	((touch and display and screen and beyond and (edge or boundary or end) and (zoom or scroll)) <in>metadata)</in>

Date Conducted: July 20, 2007.

- 8) Database Service: Internet (Google, Google Scholar, etc.): Technical Literature Search
 - File Searched: (Non Patent Literature)

Search Logic:

Search String

touchscreen display rotation degree portable fingers touchscreen display scroll portable finger beyond edge Date Conducted: July 20, 2007.

Search Directed to the Invention

The pre-examination search was directed to the claimed invention, encompassing all the features of the claims and giving the claims their broadest reasonable interpretation.

Search Directed to the Disclosure

No disclosed features that are unclaimed at this time in this application are currently seen as features that may be claimed later in this application.

Search Report from a Foreign Patent Office

No search report from a foreign patent office is provided here as the preexamination search.

Statement of Good Faith

All statements above in support of the petition to make special are based on a good faith belief that the search was conducted in compliance with the requirements of this rule.

Respectfully submitted,

Date: March 13, 2008

Robert Beyen

<u>46,552</u> (Reg. No.)

Robert B. Beyers, Ph.D. MORGAN, LEWIS & BOCKIUS LLP 2 Palo Alto Square 3000 El Camino Real, Suite 700 Palo Alto, CA 94306 (650) 843-4000

Electronic Acl	knowledgement Receipt		
EFS ID:	2997944		
Application Number:	11956969		
International Application Number:			
Confirmation Number:	8460		
Title of Invention:	List Scrolling and Document Translation, Scaling, and Rotation on a Touch-Screen Display		
First Named Inventor/Applicant Name:	Bas Ording		
Customer Number:	61725		
Filer:	Gary Scott Williams/Beverly Gemello		
Filer Authorized By:	Gary Scott Williams		
Attorney Docket Number:	P4304US1/63266-5054US		
Receipt Date:	13-MAR-2008		
Filing Date:	14-DEC-2007		
Time Stamp:	20:12:53		
Application Type:	Utility under 35 USC 111(a)		

Payment information:

Submitted wi	th Payment	no						
File Listing:								
Document Number	Document Description		File Name File Size(Bytes) I /Message Digest Pa			Pages (if appl.)		
1	Request for Reconsideration of BPAI Decision	63	63266-5054_RequestForRec	55907	no	2		
I		onsideration.pdf	6f74a4c9573cba7aa5e8abfda38c3be7 8890bc2c	10	2			
Warnings:								
Information:								

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1514189

Warnings:

Information:

Total Files Size (in bytes):

1570096

no

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Unit	ed States Paten	T AND TRADEMARK OFFICE	UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 223 www.uspto.gov	TMENT OF COMMERCE Trademark Office OR PATENTS 313-1450	
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
11/956,969	12/14/2007	Bas Ording	P4304US1/63266-5054US	8460	
61725 MORGAN LEV	7590 04/18/2008 VIS & BOCKIUS LLP	⁸ / APPLE INC.	EXAMINER		
3000 EL CAMI	SQUARE NO REAL		WILEY, DAV		
PALO ALTO, (CA 94306		ART UNIT	PAPER NUMBER	
·			2174		
•			MAIL DATE	DELIVERY MODE	
		•	04/18/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

04/17/2008

MORGAN LEWIS & BOCKIUS LLP APPLE INC. 2 PALO ALTO SQUARE 3000 EL CAMINO REAL PALO ALTO, CA 94306

DISPLAY

In re Application of: Bas ORDING Serial No.: 11/956,969 Filed: December 14, 2007 Docket: P4304US1/63266-5054US Title: LIST SCROLLING AND DOCUMENT TRANSLATION, SCALING, AND ROTATION ON A TOUCH-SCREEN

DECISION ON PETITION TO MAKE SPECIAL FOR NEW APPLICATION UNDER 37 C.F.R. § 1.102 & M.P.E.P. § 708.02

This is a decision on the renewed petition filed on March 13, 2008 to make the aboveidentified application special for accelerated examination procedure under 37 C.F.R. § 1.102(d). The original petition, submitted on December 14, 2007 was dismissed in the decision mailed on February 29, 2008.

The petition to make the application special is **<u>GRANTED</u>**.

The application is eligible for accelerated examination and the petition complies with the conditions for granting the application special status pursuant to the "Change to Practice for Petitions in Patent Applications to Make Special and for Accelerated Examination" published June 26, 2006, in the Federal Register. (71 Fed. Reg. 36323).

The prosecution of the instant application will be conducted expeditiously according to the following guidelines.

- 1. The application will be docketed to an examiner and taken up for action within two weeks of the date of this decision.
- 2. Restriction Practice:

If the examiner determines that the claims are not directed to a single invention, a telephone request to elect one single invention will be made pursuant to MPEP 812.01. As a prerequisite to the grant of this petition, the applicant has agreed to make an oral election, by telephone, without traverse. If the applicant refuses to make an election

without traverse, or the examiner cannot reach the applicant after a reasonable effort, the examiner will treat the first claimed invention (invention defined by claim 1) as having being constructively elected without traverse for examination.

3. Office action:

If it is determined that, after appropriate consultation, there is a potential rejection or any other issue to be addressed, the examiner will telephone the applicant and arrange an interview to discuss and resolve the issue. An Office action, other than a Notice of Allowance and Fee(s) Due (Notice of Allowance), will not be issued unless either: 1) an interview was conducted but did not result in agreed to action that places the application in condition for allowance, or, 2) a determination is made that an interview would be unlikely to result in the application being placed in condition for allowance, and 3) an internal conference has been held to review any rejection of any claim.

4. Time for Reply:

An Office action other than a Notice of Allowance or a final Office action will set a shortened statutory period of one month or thirty days, whichever is longer, for reply with no extension of time available under 37 CFR 1.136(a). Failure to timely file a reply within this non-extendible period for reply will result in the abandonment of the application.

5. Reply by Applicant:

A timely reply to an Office action other than the Notice of Allowance must be submitted electronically via EFS or EFS-web and limited to addressing the rejections, objections and requirement made. Any amendment that attempts to: 1) add claims which would result in more than three pending independent claims or more than twenty pending total claims; 2) present claims not encompassed by the pre-examination search or an updated accelerated examination support document; or 3) present claims that are directed a nonelected invention or an invention other than that previously claimed and examined in the application, will be treated as not fully responsive and will not be entered.

For any amendment to the claims (including any new claim) that is not encompassed by the accelerated examination support document, applicant must provide an updated accelerated examination support document that encompasses the amended or new claims at the time of filing of the amendment.

To proceed expeditiously with the examination, it is recommended that a reply with amendments made to any claim or with any new claim being added be accompanied by an updated accelerated examination support document or a statement explaining how the amended or new claim is supported by the original accelerated examination support document.

6. Information Disclosure Statement (IDS):

Any IDS filed during prosecution must be submitted electronically via EFS or EFS-web, accompanied by an updated accelerated examination support document, and be in compliance with 37 CFR 1.97 and 1.98.

7. Post-Allowance Processing:

To expedite processing of the allowed application into a patent, the applicant must: 1) pay the required fees within one month of the date of the Notice of Allowance, and 2) not file any post allowance papers not required by the Office. In no event may the issue fee be paid and accepted later than three months from the date of the Notice of Allowance.

8. After-Final and Appeal Procedures:

To expedite prosecution, after receiving the final Office action, applicant must: 1) promptly file a notice of appeal, an appeal brief and appeal fees; and 2) not request a preappeal brief conference.

Any amendment, affidavit or other evidence filed after final Office action must comply with applicable rules and the requirements outlined in numbered paragraphs 5 and 6 above.

On appeal, the application will proceed according to normal appeal procedures. After appeal, the application will again be treated special.

9. Proceedings Outside the Normal Examination Process:

If the application becomes involved in a proceeding that is outside the normal examination process (e.g., a secrecy order, national security review, interference proceeding, petitions under 37 CFR 1.181, 182 or 183), the application will be treated special before and after such proceeding.

10. Final Disposition:

The twelve-month goal of this accelerated examination procedure ends with a final disposition. The mailing of a final Office action, a Notice of Allowance, the filing of a Notice of Appeal, or the filing of a Request for Continued Examination (RCE) is the final disposition.

If, during prosecution, a paper is not filed electronically using EFS-web, a reply is filed but is not fully responsive, the application is involved in an appeal, or a proceeding outside normal examination process, the application will still be examined expeditiously, however, the final disposition may occur more than twelve months from the filing of the application. In addition, Applicant is reminded that due to the dismissal of the previous petition submission, examination may not be completed within twelve months of the filing date of the application.

Any inquiry regarding this decision should be directed to Brian Johnson, Quality Assurance Specialist, at (571) 272-3595.

Brian Johnson, WQAS 2110 Technology Center 2100 Computer Architecture, Software and Information Security

				Complete If Known			
INF	ORMATIC	ON DISCL	OSURE	Application Number	11/956,969		
	CIT	ATION		Filing Date	December 14, 2007		
				First Named Inventor Bas Ording			
	РТ	O-1449		Art Unit	2174		
				Examiner Name	Wiley, David Armand		
Sheet	1	of	1	Attorney Docket No.	P4304US1/63266-5054-US		

			U.S. PATEN	T DOCUMENTS					
Examiner Initials	Cite No.	Document Number Number - Kind Code ¹	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited	Class	Subclass	Filing Appro	Filing Date if Appropriate	
		5,495,566 B1	02/27/1996	Kwatinetz	395	157			
		6,690,387 B2	02/10/2004	Zimmerman et al.	345	684			
		2005/0012723 A1	01/20/2005	Pallakoff	345	173			
			FOREIGN PAT	ENT DOCUMENTS		1			
Examiner	Cite No. No. Foreign Patent Document Country Code ² - Number ³ - Kind Code ⁴ (<i>if known</i>)	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited C Document		Subclass	Translation		
Initials		Country Code ² - Number ³ - Kind Code ⁴ (<i>if known</i>)			Class		Yes	No	
		OTHE	R NON PATENT	LITERATURE DOCUMENT	<u>rs</u>				
Initials	No.	journal, serial, symposium	or (in CAPITAL LETI i, catalog, etc.), date, p	ERS), title of the article (when ap age(s), volume-issue number(s), p	propriate), titl ublisher, city a	e of the item (be and/or country v	ook, maga where pub	izine, lished	
		MILLER, D., "Perso	onalJava Applica	tion Environment," Sun	Microsyst	ems,			
	http://java.sun.com/products/personaljava/touchable/, June 8, 1999, 13 pages.								
					· · · · ·				

Examiner	Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ See Kind Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04. ² Enter Office that issued the document, by the two-

¹ See Kind Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04. ² Enter Office that issued the document, by the twoletter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Electronic Acknowledgement Receipt				
EFS ID:	3237321			
Application Number:	11956969			
International Application Number:				
Confirmation Number:	8460			
Title of Invention:	List Scrolling and Document Translation, Scaling, and Rotation on a Touch-Screen Display			
First Named Inventor/Applicant Name:	Bas Ording			
Customer Number:	61725			
Filer:	Robert B. Beyers./Beverly Gemello			
Filer Authorized By:	Robert B. Beyers.			
Attorney Docket Number:	P4304US1/63266-5054US			
Receipt Date:	30-APR-2008			
Filing Date:	14-DEC-2007			
Time Stamp:	20:57:28			
Application Type:	Utility under 35 USC 111(a)			

Payment information:

Submitted with Payment		no				
File Listing:						
Document Number	Document Description		File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Examination support document 63	632	63266-5054_SupplAESuppo rtDoc.pdf	270687	2	53
				542a9989b5fc915bd3e528ce7a311b90 5b0e4ee5	10	
Warnings:						
Information:						

2	Information Disclosure Statement (IDS) Filed	63266-5054_SuppIIDS.pdf	222990 cba1f8ef395027a3be5bb114739d68b6 d5737400	no	5		
Warnings:							
Information	:						
This is not an	USPTO supplied IDS fillable form						
ų	NPL Documents	5054-PersonalJavaApplicatio	142498	no	13		
5	Ni L Documents	n.pdf	302512307759421431c9d7fc49d5ebfc8 0691bdf	110	10		
Warnings:							
Information	:						
		Total Files Size (in bytes)	: 63	36175			
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. New Applications Under 35 U.S.C. 111 If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. National Stage of an International Application under 35 U.S.C. 371 If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. New International Application Filed with the USPTO as a Receiving Office If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.							

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Bas Ording	Confirmatio	on No.:	8460
Serial No.:	11/956,969	Art Unit:	2174	
Filed:	December 14, 2007	Examiner:	Wiley, Da	avid Armand
For:	List Scrolling and Document Translation, Scaling, and Rotation on a Touch-Screen Display	Attorney D P430	ocket No.: 4US1/6326	56-5054-US

Supplemental Accelerated Examination Support Document

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam:

This supplemental accelerated examination support document (AESD) is provided in support of the petition for accelerated examination filed on December 14, 2007. This supplemental AESD includes an additional reference deemed most closely related to the subject matter of the claims, namely Miller, D., "PersonalJava Application Environment," http://java.sun.com/products/personaljava/touchable/, June 8, 1999, 12 pages.

The Commissioner is hereby authorized to charge any required fee(s) to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (order no. 63266-5054).

Listing of Claims begins on page 2 of this paper.

References Deemed Most Closely Related are stated on page 6 of this paper.

Identification of Limitations Disclosed by References begins on page 6.

Detailed Explanation of Patentability begins on page 26 of this paper.

Concise Statement of Utility begins on page 27 of this paper.

Showing of Support under 35 USC 112, First Paragraph begins on page 28 of this paper.

Identification of References Disqualified as Prior Art under 35 USC 103(c) begins on page 53 of this paper.

Listing of Claims

There are 3 independent claims and 20 total claims currently pending in the application. The claims read as follows:

A computer-implemented method, comprising:

 at a device with a touch screen display,
 detecting a movement of an object on or near the touch screen display;
 in response to detecting the movement, translating an electronic document

 displayed on the touch screen display in a first direction;

in response to an edge of the electronic document being reached while translating the electronic document in the first direction while the object is still detected on or near the touch screen display, displaying an area beyond the edge of the document; and

after the object is no longer detected on or near the touch screen display, translating the document in a second direction until the area beyond the edge of the document is no longer displayed.

2. The computer-implemented method of claim 1, wherein the device is a portable multifunction device.

3. The computer-implemented method of claim 1, wherein the movement of the object is on the touch screen display.

4. The computer-implemented method of claim 1, wherein the object is a finger.

5. The computer-implemented method of claim 1, wherein the first direction is a vertical direction, a horizontal direction, or a diagonal direction.

6. The computer-implemented method of claim 1, wherein the electronic document is a web page.

7. The computer-implemented method of claim 1, wherein the electronic document is a digital image.

8. The computer-implemented method of claim 1, wherein the electronic document is a word processing, spreadsheet, email or presentation document.

9. The computer-implemented method of claim 1, wherein the electronic document includes a list of items.

10. The computer-implemented method of claim 1, wherein the second direction is opposite the first direction.

11. The computer-implemented method of claim 1, wherein translating in the first direction prior to reaching an edge of the document has an associated speed of translation that corresponds to a speed of movement of the object.

12. The computer-implemented method of claim 1, wherein translating in the first direction is in accordance with a simulation of an equation of motion having friction.

13. The computer-implemented method of claim 1, wherein the area beyond the edge of the document is black, gray, a solid color, or white.

14. The computer-implemented method of claim 1, wherein the area beyond the edge of the document is visually distinct from the document.

15. The computer-implemented method of claim 1, wherein translating the document in the second direction is a damped motion.

16. The computer-implemented method of claim 1, wherein changing from translating in the first direction to translating in the second direction until the area beyond the edge of the document is no longer displayed makes the edge of the electronic document appear to be elastically attached to an edge of the touch screen display or to an edge displayed on the touch screen display.

17. The computer-implemented method of claim 1, wherein translating in the first direction prior to reaching the edge of the electronic document has a first associated translating distance that corresponds to a distance of movement of the object prior to reaching the edge of the electronic document; and wherein displaying an area beyond the edge of the electronic document comprises translating the electronic document in the first direction for a second associated translating distance, wherein the second associated

translating distance is less than a distance of movement of the object after reaching the edge of the electronic document.

18. The computer-implemented method of claim 1, wherein translating in the first direction prior to reaching the edge of the electronic document has a first associated translating speed that corresponds to a speed of movement of the object, and wherein displaying an area beyond the edge of the electronic document comprises translating the electronic document in the first direction at a second associated translating speed, wherein the second associated translating speed is slower than the first associated translating speed.

19. A device, comprising:

a touch screen display;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the programs including:

instructions for detecting a movement of an object on or near the touch screen display;

instructions for translating an electronic document displayed on the touch screen display in a first direction, in response to detecting the movement;

instructions for displaying an area beyond an edge of the electronic document in response to the edge of the electronic document being reached while translating the electronic document in the first direction while the object is still detected on or near the touch screen display; and

instructions for translating the document in a second direction until the area beyond the edge of the document is no longer displayed, after the object is no longer detected on or near the touch screen display.

20. A computer readable storage medium having stored therein instructions, which when executed by a device with a touch screen display, cause the device to:

detect a movement of an object on or near the touch screen display;

translate an electronic document displayed on the touch screen display in a first direction, in response to detecting the movement;

display an area beyond an edge of the electronic document if the edge of the electronic document is reached while translating the electronic document in the first direction while the object is still detected on or near the touch screen display; and

translate the document in a second direction until the area beyond the edge of the document is no longer displayed, after the object is no longer detected on or near the touch screen display.

References Deemed Most Closely Related:

An Information Disclosure Statement in compliance with 37 CFR 1.98 has been filed herewith citing each of the following references deemed most closely related to the subject matter of the claims.

1. Zimmerman et al	US 6,690,387					
2. Kwatinetz et al	US 5,495,566					
3. Pallakoff	US Patent Application Publication 2005/0012723					
4. Miller, D., "PersonalJava Application Environment,"						
http://java.sun.com/products/personaljava/touchable/, June 8, 1999, 12 pages.						

Identification of Limitations Disclosed by References:

The following charts identify the limitations that are disclosed, in whole or in part, by Zimmerman, Kwatinetz, Pallakoff, and Miller.

Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
1. A computer-	Abstract.	Abstract.	Abstract.
implemented method,			
comprising:			
at a device with a touch screen display,	Col. 5, lines 26-29, and Fig. 2.	Kwatinetz discloses a system with a "display" (Col. 4, lines 50-56, col. 5, lines 37-44, and Figs. 1-2). But Kwatinetz does not disclose "a device with a <u>touch</u> <u>screen</u> display" as required by claim 1.	Paragraph 0109 and Fig. 14-A.
detecting a movement of an	Col. 3, lines 15-16, Col. 5, lines 27-31,		Paragraph 0120.
object on or near the	and Fig. 2.		
touch screen display;	C		
in response to	Col. 3, lines 55-57,		Paragraph 0120.
movement	Col. 5, mes 27-51.		
translating an		\backslash	
electronic document		Х	
displayed on the			
touch screen display			
in a first direction;			

Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
in response to an	\land /	\land /	\land
edge of the electronic			\backslash /
document being			
reached while			
translating the			
electronic document			\setminus /
in the first direction			\backslash
while the object is	X	X	X
still detected on or			
near the touch screen			
display displaying			
an area beyond the			
edge of the			
document: and	/	/	/ \
after the object is no	$\langle \rangle$	$\langle \cdots \rangle$	$\langle \cdots \rangle$
longer detected on or	$ \rangle / $		\land
near the touch screen			
display translating			
the decument in a			\setminus
second direction until	X		Х
the area havend the			
adaa af tha daaumant			
is no longer			
displayed			
2 The commuter	Zinana amaan	/ Vuuntinata disalasas	Deve graph 0002
2. The computer-	disalasas tha	wathetz discloses	Paragraph 0002.
of alaim 1 wherein	alements of a	a uata processing	
di chamina, wherein	elements of a	system configured	
the device is a	$\begin{array}{c} \text{computer (Col. 5,} \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ $	using computer	
	lines 48-51).	hardware (Col. 4,	
multifunction device.		lines 50-56, and	
	But Zimmerman	F1g. 1).	
	does not disclose "a		
	portable	But Kwatinetz does	
	multifunction	not disclose "a	
	device" as required	portable	
	by claim 2.	multifunction	
		device" as required	
		by claim 2.	
3. The computer-	Col. 5, lines 26-29,		Paragraph 0120.
implemented method	and Fig. 2.		
of claim 1, wherein			
the movement of the			
object is on the touch			
screen display.			

Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
4. The computer-	Col. 5, lines 26-29,	\setminus	Paragraph 0120.
implemented method	and Fig. 2.		
of claim 1, wherein			
the object is a finger.			
5. The computer-	Abstract.	Col. 5, lines 50-53.	Paragraph 0120.
implemented method			
of claim 1, wherein the first direction is a			
vertical direction a			
horizontal direction			
or a diagonal			
direction.			
6. The computer-	Zimmerman	Kwatinetz discloses	Fig. 14-A.
implemented method	discloses the	the scrolling of	
of claim 1, wherein	displacement of	"screen objects or	
the electronic	data on a touch	information" on the	
document is a web	screen (Col. 5, lines	display (Col. 5, line	
page.	45-47).	63 - col. 6, line 6).	
	But Zimmerman	But Kwatinetz does	
	does not disclose "a	not disclose "a web	
	web page" as	not disclose a web	
	required by claim 6.	by claim 6.	
7. The computer-		Col. 5, line 63 - col.	Paragraph 0002.
implemented method		6, line 6.	
of claim 1, wherein			
the electronic			
document is a digital			
1mage.		Cal 5 line (2 a a l)	Dave events 0002
8. The computer-	Zimmerman disalasas tha	Col. 5, line 65 - col.	Paragraphs 0002
of claim 1 wherein	displacement of	0, IIIC 0.	and 0000.
the electronic	data on a touch		
document is a word	screen (Col. 5. lines		
processing,	45-47).		
spreadsheet, email or	,		
presentation	But Zimmerman		
document.	does not disclose "a		
	word processing,		
	spreadsheet, email		
	or presentation		
	document" as		
	required by claim 8.		
Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
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9. The computer-	Col. 1, lines 49-51.	Kwatinetz discloses	Paragraph 0192
implemented method		the scrolling of	and Fig. 4-A.
of claim 1, wherein		"screen objects or	
the electronic		information" on the	
document includes a		display (Col. 5, line	
list of items.		63 - col. 6, line 6).	
		But Kwatinetz does	
		not disclose "a list	
		of items" as	
		required by claim 9.	
10. The computer-			
implemented method			
of claim 1, wherein	\sim		\sim
the second direction			
is opposite the first			
direction.			
11. The computer-	Abstract.	Kwatinetz discloses	Paragraph 0194.
implemented method		that the initial	
of claim 1, wherein		scrolling speed of	
translating in the first		contents	
direction prior to		corresponds to the	
reaching an edge of		acceleration of the	
the document has an		mouse cursor on the	
associated speed of		display (Col. 7,	
translation that		lines $48-65$, and Eigen $4A$	
corresponds to a		F1g. 4A).	
speed of movement		Dut Variation at a damag	
of the object.		but Kwatinetz does	
		translation speed	
		"correspond[ing] to	
		a speed of	
		movement of the	
		object" as required	
		by claim 11.	

Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
12. The computer-	Zimmerman	Kwatinetz discloses	\backslash
implemented method	discloses the	several ways of	
of claim 1, wherein	displacement speed	adjusting the scroll	\backslash /
translating in the first	of the image being	speed (Col. 8, lines	
direction is in	decreased at a	62-65 in connection	
accordance with a	controlled rate	with step 424 of	
simulation of an	(Abstract).	Fig. 4B, col. 9,	
equation of motion		lines 57-60, col. 10,	\setminus /
having friction.	But Zimmerman	lines 45-49, and	\setminus /
	does not disclose	Figs. 5-6).	\backslash
	that the		Х
	displacement of the	But Kwatinetz does	/
	image is "in	not disclose	
	accordance with a	adjusting the scroll	
	simulation of an	speed "in	
	equation of motion	accordance with a	
	having friction" as	simulation of an	
	required by claim	equation of motion	
	12.	having friction" as	
		required by claim	/ \
		12.	
13. The computer-	\setminus /	\land /	\setminus /
implemented method			
of claim 1, wherein			
the area beyond the	\times	\mathbf{X}	X
edge of the document			
is black, gray, a solid			
color, or white.	$\langle \dots \rangle$	$\langle \dots \rangle$	$\langle \dots \rangle$
14. The computer-	\backslash	\land	\backslash
implemented method			
of claim 1, wherein			
the area beyond the	\wedge		\wedge
eage of the document			
1s visually distinct			
from the document.	$\langle \rangle$	$\langle \rangle$	$\langle \cdots \rangle$
15. The computer-			
implemented method			
translating the			
document in the			
accument in the			
demned motion			
uampeu monon.			

Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
16. The computer-	Λ /	\ /	\backslash /
implemented method		\land	$ \rangle $ /
of claim 1, wherein		\backslash /	
changing from			
translating in the first			
direction to			
translating in the		\setminus /	
second direction until		\setminus /	\backslash
the area beyond the	$ \rangle / $	\setminus /	\setminus
edge of the document		\bigvee	\bigvee
is no longer	\land	\wedge	\wedge
displayed makes the			
edge of the electronic			
document appear to			
be elastically			
attached to an edge			
of the touch screen			
display or to an edge			
displayed on the	/ \	/ \	/ \
touch screen display.	\vee	/	/

Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
17. The computer-	Λ	\land /	N A
implemented method	\ /		\ /
of claim 1, wherein			\ /
translating in the first			
direction prior to			
reaching the edge of			
the electronic			
document has a first			
associated translating			
distance that			
corresponds to a			
distance of			
movement of the		\setminus /	
object prior to			
reaching the edge of		$ \setminus $	
the electronic		\setminus	$ \rangle \langle \rangle $
document; and	V V	V	Y I
wherein displaying	\land	\wedge	\land
an area beyond the		/ \	
edge of the electronic			
document comprises			
translating the			
electronic document			
in the first direction			
for a second			
associated translating			
distance, wherein the			
second associated			
translating distance is			
less than a distance			
object offer reaching			/ \
the adap of the	/ \	/ \	/ \
alectronic desument	/	/	/ \
electronic document.	V	V N	V N

Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
18. The computer- implemented method of claim 1, wherein translating in the first direction prior to reaching the edge of the electronic document has a first associated translating speed that corresponds to a speed of movement of the object, and wherein displaying an area beyond the edge of the electronic document comprises translating the electronic document in the first direction at a second associated translating speed, wherein the second associated translating speed is slower than the first associated translating speed. 19. A device, comprising: a touch screen display;	Col. 5, lines 12-15, 26-29, and Fig. 2. Col. 5, lines 12-15, 26-29, and Fig. 2. Col. 5, lines 12-15, 26-29, and Fig. 2.	Abstract and Fig. 1. Kwatinetz discloses a system with a "display" (Col. 4, lines 50-56, co. 5, lines 37-44, and Figs. 1-2). But Kwatinetz does not disclose "a touch screen display" as required by claim 19. Fig. 1	Paragraph 0274
processors;	26-29, and Fig. 2.	1 1g. 1.	and Fig. 24.

Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
memory; and	Col. 5, lines 16-19.	Fig. 1.	Paragraph 0274
			and Fig. 24.
one or more	Col. 5, lines 29-31.	Fig. 1.	Paragraph 0274
programs, wherein			and Fig. 24.
the one or more			
programs are stored			
in the memory and			
configured to be			
executed by the one			
or more processors,			
the programs			
including:			
instructions for	Col. 3, lines 15-16,	\setminus	Paragraph 0120.
detecting a	Col. 5, lines 27-31.		
movement of an		$ $ \times	
object on or near the			
touch screen display;			
instructions for	Col. 3, lines 55-57,	\land	Paragraph 0120.
translating an	Col. 5, lines 27-31.		
electronic document			
displayed on the			
touch screen display			
in a first direction, in			
response to detecting			
the movement;			
instructions for	\land /	Λ /	\land /
displaying an area	$ \rangle /$		
beyond an edge of			
the electronic			
document in response			
to the edge of the			
electronic document	$ \rangle \rangle / \rangle$	$ \land / $	\backslash
being reached while	X	X	Х
translating the			
electronic document			
in the first direction			
while the object is			
still detected on or			
near the touch screen			/ \
display; and	\vee	\checkmark	/

Claim Language	Zimmerman et al	Kwatinetz et al	Pallakoff
 instructions for translating the document in a second direction until the area beyond the edge of the document is no longer displayed, after the object is no longer detected on or near the touch screen display. 20. A computer readable storage medium having stored therein instructions, which when executed by a device with a touch screen display, cause the device to: 	Col. 5, lines 17-21, and 29-31.	Kwatinetz discloses a system with a "display" (Col. 4, lines 50-64, col. 5, lines 37-44, and Figs. 1-2). But Kwatinetz does not disclose "a device with a <u>touch</u> <u>screen</u> display" as required by claim	Paragraph 0274, and Fig. 24.
detect a movement of an object on or near the touch screen display;	Col. 3, lines 15-16, Col. 5, lines 27-31.		Paragraph 0120.
translate an electronic document displayed on the touch screen display in a first direction, in response to detecting the movement;	Col. 3, lines 55-57, Col. 5, lines 27-31.		Paragraph 0120.

Zimmerman et al	Kwatinetz et al	Pallakoff
\land	\backslash /	\land
	\backslash	\backslash
X	X	X
$\langle \cdots \rangle$	$\langle \cdots \rangle$	$\langle \cdots \rangle$
	\land	\backslash /
		\backslash
X	Х	Х
	\backslash	/
	Zimmerman et al	Zimmerman et al Kwatinetz et al

Claim Language	Miller
1. A computer-	Page 1 states "This document focuses on the Touchable look
implemented method,	and feel, a specific look and feel designed for touch screen
comprising:	based consumer products, including retail kiosks, personal
	digital assistants (PDAs), and screen phones."
at a device with a	Page 1 states "This document focuses on the Touchable look
touch screen display,	and feel, a specific look and feel designed for touch screen
	based consumer products, including retail kiosks, personal
	digital assistants (PDAs), and screen phones."
detecting a movement	Page 6 states " the Touchable look and feel is targeted for
of an object on or near	use on touch screen based consumer products. On such
the touch screen	products, typically a finger or a stylus is used for input"
display;	
	But Miller does not disclose "detecting a movement of an
	object on or near the touch screen display" as required by this
	claim. Rather, Miller discloses touch screens that use one or
	more stationary taps to activate soft buttons (e.g., scroll-up and
	scroll-down buttons) on the touch screen: "A single tap
	interaction model is common" (Miller, page 6)

Claim Language	Miller
in response to	Pages 9-10 disclose touch screens that use stationary taps on
detecting the	scroll-up and scroll-down buttons to translate electronic lists on
movement, translating	the touch screen.
an electronic document	
displayed on the touch	But Miller does not disclose translating an electronic document
screen display in a first	"in response to detecting the movement" (i.e., in response to
direction:	detecting the movement of the object on or near the touch
	screen display) as required by this claim.
in response to an edge	Page 9 states "When the scrolling list is at the top (see Figure
of the electronic	6), there is a half-space left blank to tell users they are at the
document being	top. If there is more information to scroll to, then the last item
reached while	is shown clipped in half. In addition, the scroll buttons are
translating the	enabled or disabled appropriately for each state When the
electronic document in	list is at the bottom (see Figure 8) the half space is at the
the first direction	bottom and the upper item is clipped "
while the object is still	bottom and the upper item is enpped.
detected on or near the	
touch screen display	
displaying an area	
beyond the edge of the	
document: and	
after the object is no	
longer detected on or	
near the touch screen	
display, translating the	
document in a second	
direction until the area	
beyond the edge of the	
document is no longer	
displayed.	
2. The computer-	Page 1 states "This document focuses on the Touchable look
implemented method	and feel, a specific look and feel designed for touch screen
of claim 1, wherein the	based consumer products, including retail kiosks, personal
device is a portable	digital assistants (PDAs), and screen phones."
multifunction device.	
3. The computer-	Page 6 states " the Touchable look and feel is targeted for
implemented method	use on touch screen based consumer products. On such
of claim 1, wherein the	products, typically a finger or a stylus is used for input"
movement of the	
object is on the touch	
screen display.	
4. The computer-	Page 6 states " the Touchable look and feel is targeted for
implemented method	use on touch screen based consumer products. On such
of claim 1, wherein the	products, typically a finger or a stylus is used for input"
object is a finger.	

Claim Language	Miller
5. The computer-	Figures 6-8 show a list that is scrolled in a vertical direction.
implemented method	
of claim 1, wherein the	
first direction is a	
vertical direction, a	
horizontal direction, or	
a diagonal direction.	
6. The computer-	
implemented method	
of claim 1, wherein the	
electronic document is	
a web page.	
7. The computer-	
implemented method	
of claim 1, wherein the	
electronic document is	
a digital image.	
8. The computer-	
implemented method	
of claim 1, wherein the	
electronic document is	
a word processing,	
spreadsheet, email or	
presentation document.	
9. The computer-	Figures 6-8 show a list of items that is scrolled in a vertical
implemented method	direction.
of claim 1, wherein the	
electronic document	
includes a list of items.	
10. The computer-	
implemented method	
of claim 1, wherein the	
second direction is	
opposite the first	
direction.	

Claim Language	Miller
11. The computer-	
implemented method	
of claim 1, wherein	
translating in the first	
direction prior to	
reaching an edge of the	
document has an	
associated speed of	
translation that	
corresponds to a speed	
of movement of the	
object.	
12. The computer-	
implemented method	
of claim 1, wherein	
translating in the first	
direction is in	\times
accordance with a	
simulation of an	
equation of motion	
having friction.	
13. The computer-	Page 9 states "When the scrolling list is at the top (see Figure
implemented method	6), there is a half-space left blank to tell users they are at the
of claim 1, wherein the	top. If there is more information to scroll to, then the last item
area beyond the edge	is shown clipped in half. In addition, the scroll buttons are
of the document is	enabled or disabled appropriately for each state When the
black, gray, a solid	list is at the bottom (see Figure 8), the half space is at the
color, or white.	bottom and the upper item is clipped."
14. The computer-	Page 9 states "When the scrolling list is at the top (see Figure
implemented method	6), there is a half-space left blank to tell users they are at the
of claim 1, wherein the	top. If there is more information to scroll to, then the last item
area beyond the edge	is shown clipped in half. In addition, the scroll buttons are
of the document is	enabled or disabled appropriately for each state When the
visually distinct from	list is at the bottom (see Figure 8), the half space is at the
the document.	bottom and the upper item is clipped."
15. The computer-	
implemented method	
of claim 1, wherein	
translating the	
document in the	
second direction is a	
damped motion.	

Claim Language	Miller
16. The computer-	
implemented method	
of claim 1, wherein	
changing from	
translating in the first	
direction to translating	
in the second direction	
until the area beyond	
the edge of the	
document is no longer	
displayed makes the	
edge of the electronic	
document appear to be	
elastically attached to	
an edge of the touch	
screen display or to an	
edge displayed on the	
touch screen display.	



Claim Language	Miller
18. The computer-	
implemented method	
of claim 1, wherein	
translating in the first	
direction prior to	
reaching the edge of	
the electronic	
document has a first	
associated translating	
speed that corresponds	
to a speed of	
movement of the	
object, and wherein	
displaying an area	X
beyond the edge of the	
electronic document	
comprises translating	
the electronic	
document in the first	
direction at a second	
associated translating	
speed, wherein the	
second associated	
translating speed is	
slower than the first	
associated translating	
speed.	
19. A device,	Page 1 states "This document focuses on the Touchable look
comprising:	and feel, a specific look and feel designed for touch screen
	based consumer products, including retail kiosks, personal
	digital assistants (PDAs), and screen phones."
a touch screen display;	Page 1 states "This document focuses on the Touchable look
	and feel, a specific look and feel designed for touch screen
	based consumer products, including retail kiosks, personal
	digital assistants (PDAs), and screen phones."
one or more	Page 1 states "This document focuses on the Touchable look
processors;	and feel, a specific look and feel designed for touch screen
	based consumer products, including retail kiosks, personal
	digital assistants (PDAs), and screen phones." PDAs and screen
	phones inherently include a processor, memory, and one or
	more programs.

Claim Language	Miller
memory; and	Page 1 states "This document focuses on the Touchable look
	and feel, a specific look and feel designed for touch screen
	based consumer products, including retail kiosks, personal
	digital assistants (PDAs), and screen phones." PDAs and screen
	phones inherently include a processor, memory, and one or
	more programs.
one or more programs,	Page 1 states "This document focuses on the Touchable look
wherein the one or	and feel, a specific look and feel designed for touch screen
more programs are	based consumer products, including retail kiosks, personal
stored in the memory	digital assistants (PDAs), and screen phones." PDAs and screen
and configured to be	phones inherently include a processor, memory, and one or
executed by the one or	more programs.
more processors, the	
programs including:	
instructions for	Page 6 states " the Touchable look and feel is targeted for
detecting a movement	use on touch screen based consumer products. On such
of an object on or near	products, typically a finger or a stylus is used for input"
the touch screen	
display;	But Miller does not disclose "instructions for detecting a
	movement of an object on or near the touch screen display" as
	required by this claim. Rather, Miller discloses touch screens
	that use one or more <u>stationary</u> taps to activate soft buttons
	(e.g., scroll-up and scroll-down buttons) on the touch screen:
instructions for	A single tap interaction model is common (Willer, page 6)
translating on	Pages 9-10 disclose louch screens that use <u>stationary</u> taps on
alastronia dogument	scron-up and scron-down buttons to translate electronic lists on
displayed on the touch	
displayed on the totell	But Miller door not disalogo instructions for translating on
direction in response	alectronic document "in response to detecting the movement"
to detecting the	(i.e. in response to detecting the movement of the object on or
no delecting the	(i.e., in response to detecting the movement of the object of of
movement,	hear the touch screen display) as required by this claim.

Claim Language	Miller
instructions for	Page 9 states "When the scrolling list is at the top (see Figure
displaying an area	6), there is a half-space left blank to tell users they are at the
beyond an edge of the	top. If there is more information to scroll to, then the last item
electronic document in	is shown clipped in half. In addition, the scroll buttons are
response to the edge of	enabled or disabled appropriately for each state When the
the electronic	list is at the bottom (see Figure 8), the half space is at the
document being	bottom and the upper item is clipped."
reached while	
translating the	
electronic document in	
the first direction	
while the object is still	
detected on or near the	
touch screen display;	
and	
instructions for	
translating the	
document in a second	
direction until the area	
beyond the edge of the	
document is no longer	
displayed, after the	
object is no longer	
detected on or near the	
touch screen display.	
20. A computer	Page 1 states "This document focuses on the Touchable look
readable storage	and feel, a specific look and feel designed for touch screen
medium having stored	based consumer products, including retail kiosks, personal
therein instructions,	digital assistants (PDAs), and screen phones." PDAs and screen
which when executed	phones inherently include a computer readable storage medium
by a device with a	having stored therein instructions.
touch screen display,	
cause the device to:	
detect a movement of	Page 6 states " the Touchable look and feel is targeted for
an object on or near	use on touch screen based consumer products. On such
the touch screen	products, typically a finger or a stylus is used for input"
display;	
	But Miller does not disclose instructions that when executed
	cause a device with a touch screen display to "detect a
	movement of an object on or near the touch screen display" as
	required by this claim. Rather, Miller discloses touch screens
	that use one or more stationary taps to activate soft buttons
	(e.g., scroll-up and scroll-down buttons) on the touch screen:
	"A single tap interaction model is common" (Miller, page 6)

Claim Language	Miller
translate an electronic	Pages 9-10 disclose touch screens that use stationary taps on
document displayed on	scroll-up and scroll-down buttons to translate electronic lists on
the touch screen	the touch screen.
display in a first	
direction, in response	But Miller does not disclose instructions that when executed
to detecting the	cause a device with a touch screen display to translate an
movement;	electronic document "in response to detecting the movement"
	(i.e., in response to detecting the movement of the object on or
	near the touch screen display) as required by this claim.
display an area beyond	Page 9 states "When the scrolling list is at the top (see Figure
an edge of the	6), there is a half-space left blank to tell users they are at the
electronic document if	top. If there is more information to scroll to, then the last item
the edge of the	is shown clipped in half. In addition, the scroll buttons are
electronic document is	enabled or disabled appropriately for each state When the
reached while	list is at the bottom (see Figure 8), the half space is at the
translating the	bottom and the upper item is clipped."
electronic document in	
the first direction	
while the object is still	
detected on or near the	
touch screen display;	
and	
translate the document	
in a second direction	
until the area beyond	
the edge of the	
document is no longer	
displayed, after the	
object is no longer	
detected on or near the	
touch screen display.	

In view of the remarks in the chart above, claims 1-20 are not anticipated by Zimmerman, Kwatinetz, Pallakoff, or Miller because none of these references discloses each and every limitation of these claims.

Detailed Explanation of Patentability:

<u>35 U.S.C. § 102</u>

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131 citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). . . . "The identical invention must be shown in as complete detail as is contained in the ... claim." MPEP § 2131 citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

All of claims 1-20 include the element that after the object is no longer detected on or near the touch screen display, the document is translated in a second direction until the area beyond the edge of the document is no longer displayed:

"after the object is no longer detected on or near the touch screen display, translating the document in a second direction until the area beyond the edge of the document is no longer displayed" (Claim 1);

"instructions for translating the document in a second direction until the area beyond the edge of the document is no longer displayed, after the object is no longer detected on or near the touch screen display" (Claim 19); and

"translate the document in a second direction until the area beyond the edge of the document is no longer displayed, after the object is no longer detected on or near the touch screen display" (Claim 20).

As shown in the chart in the preceding section, Zimmerman, Kwatinetz, Pallakoff, and Miller do not teach or suggest this claim element, either expressly or inherently.

Thus, at least one element in each of claims 1-20 is not taught or suggested by Zimmerman, Kwatinetz, Pallakoff, and/or Miller. As shown in the chart in the preceding section, some of the claims include additional elements that are not taught or suggested by Zimmerman, Kwatinetz, Pallakoff, or Miller.

Applicants respectfully submit that for at least the reasons set forth above, Zimmerman, Kwatinetz, Pallakoff, and Miller do not anticipate any of claims 1-20 of the above captioned patent application under 35 U.S.C. § 102(a)-(g) at least because none of these references discloses each and every limitation of any of claims 1-20. MPEP §2131.

<u>35 U.S.C. § 103(a)</u>

One of the criteria required to establish a prima facie case of obviousness is that the prior art must teach or suggest all the claim limitations. MPEP §2143.

Applicants respectfully submit that Zimmerman, Kwatinetz, Pallakoff, and Miller, either standing alone or in combination, do not render claims 1-20 of the above-captioned patent application obvious under 35 U.S.C. § 103(a) because, as explained above, at least one element in each of claims 1-20 is not taught or suggested by Zimmerman, Kwatinetz, Pallakoff, and/or Miller. MPEP §2143.

Concise Statement of Utility:

The invention as claimed in independent claims 1, 19, and 20 has utility at least because it visually indicates when one or more edges of an electronic document have been reached.

Showing of Support under 35 USC 112, First Paragraph:

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application
		claims benefit	claims benefit	claims benefit
1. A computer-	At least paragraph	At least paragraph 0011	At least paragraph 0011	At least paragraph 0011
implemented method,	0010; and Figures 7	and claims 1-2; and	and claims 1-2; and	and claims 1-2; and
comprising:	and 8A-8D.	Figures 7 and 8A-8D.	Figures 7 and 8A-8D.	Figures 7 and 8A-8D.
at a device with a touch	At least paragraphs	At least paragraphs	At least paragraphs	At least paragraphs
screen display,	0010 and 0103; and	0011 and 0104 and	0011 and 0082 and	0011 and 0082 and
	Figure 2.	claims 1-2; and Figure	claims 1-2; and Figure	claims 1-2; and Figure
	_	2.	2.	2.
detecting a movement of an	At least paragraphs	At least paragraphs	At least paragraphs	At least paragraphs
object on or near the touch	0010 and 0148; and	0011 and 0149 and	0011 and 0122 and	0011 and 0122 and
screen display;	Figures 7 and 8A-8D.	claims 1-2; and Figures	claims 1-2; and Figures	claims 1-2; and Figures
		7 and 8A-8D.	7 and 8A-8D.	7 and 8A-8D.
in response to detecting the	At least paragraphs	At least paragraphs 011	At least paragraphs 011	At least paragraphs 011
movement, translating an	0010 and 0149; and	and 0150 and claims 1-	and 0123 and claims 1-	and 0123 and claims 1-
electronic document	Figures 7 and 8A-8D.	2; and Figures 7 and	2; and Figures 7 and	2; and Figures 7 and
displayed on the touch		8A-8D.	8A-8D.	8A-8D.
screen display in a first				
direction;				

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
in response to an edge of	At least paragraphs	At least paragraphs 011	At least paragraphs 011	At least paragraphs 011
the electronic document	0010 and 0151; and	and 0152 and claims 1-	and 0125 and claims 1-	and 0125 and claims 1-
being reached while	Figures 7 and 8A-8D.	2; and Figures 7 and	2; and Figures 7 and	2; and Figures 7 and
translating the electronic		8A-8D.	8A-8D.	8A-8D.
document in the first				
direction while the object is				
still detected on or near the				
touch screen display,				
displaying an area beyond				
the edge of the document;				
and				
after the object is no longer	At least paragraphs	At least paragraphs 011	At least paragraphs 011	At least paragraphs 011
detected on or near the	0010 and 0152 ; and E	and 0153 and claims 1-	and 0126 and claims 1-	and 0126 and claims 1-
translating the decument in	Figures / and 8A-8D.	2; and Figures / and	2; and Figures / and	2; and Figures / and
a second direction until the		8A-8D.	8A-8D.	8A-8D.
a second direction until the				
document is no longer				
displayed				
2 The computer-	At least paragraphs	At least naragraphs	At least naragraphs	At least naragraphs
implemented method of	0103 and 0148 and	0104 and 0149 and	0082 and 0122 and	0082 and 0122 and
claim 1, wherein the device	Figures 2 and 4	Figures 2 and 4	Figures 2 and 4	Figures 2 and 4
is a portable multifunction				
device.				

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
3. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
implemented method of	0148; and Figure 7.	0149; and Figure 7.	0122; and Figure 7.	0122; and Figure 7.
claim 1, wherein the				
movement of the object is				
on the touch screen display.				
4. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
implemented method of	0148; and Figure 7.	0149; and Figure 7.	0122; and Figure 7.	0122; and Figure 7.
claim 1, wherein the object $$				
is a finger.				
5. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
implemented method of	0149; and Figures 7	0150; and Figures 7	0123; and Figures 7	0123; and Figures 7
claim 1, wherein the first	and 8A-8D.	and 8A-8D.	and 8A-8D.	and 8A-8D.
direction is a vertical				
direction, a horizontal				
direction, or a diagonal				
direction.				
6. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
implemented method of	0149; and Figures 8A-	0150; and Figures 8A-	0123; and Figures 8A-	0123; and Figures 8A-
claim 1, wherein the	8D.	8D.	8D.	8D.
electronic document is a				
web page.				

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
7. The computer-	At least paragraphs	At least paragraphs	At least paragraph	At least paragraph
implemented method of	0149 and 0156.	0150 and 0157.	0059.	0059.
claim 1, wherein the				
electronic document is a				
digital image.				
8. The computer-	At least paragraphs	At least paragraphs	At least paragraphs	At least paragraphs
implemented method of	0149 and 0156.	0150 and 0157.	0123 and 0128 .	0123 and 0128 .
claim 1, wherein the				
electronic document is a				
word processing,				
spreadsheet, email or				
presentation document.				
9. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
implemented method of	0133; and Figures 5	0134; and Figures 5	0110; and Figures 5	0110; and Figures 5
claim 1, wherein the	and 6A-6D.	and 6A-6D.	and 6A-6D.	and 6A-6D.
electronic document				
Includes a list of items.				
10. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
aloging 1 wherein the second	ond 8A 8D	ond 8A 8D	ord 84 8D	ond 84 8D
direction is encoded the	and oA-oD.	and oA-oD.	anu oA-oD.	anu oA-oD.
first direction				
first direction.				

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
11. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
implemented method of	0150; and Figure 7.	0151; and Figure 7.	0124; and Figure 7.	0124; and Figure 7.
claim 1, wherein translating				
in the first direction prior to				
reaching an edge of the				
document has an associated				
speed of translation that				
corresponds to a speed of				
movement of the object.				
12. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
implemented method of	0150; and Figure 7.	0151; and Figure 7.	0124; and Figure 7.	0124; and Figure 7.
claim I, wherein translating				
in the first direction is in				
accordance with a				
simulation of an equation				
of motion having inclion.				
13. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
alaim 1 wherein the cree	ord SC	ord SC	ord SC	ord SC
bayand the adge of the	and oc.	and oc.		
document is black gray a				
solid color, or white				
some color, or winte.				

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
14. The computer- implemented method of claim 1, wherein the area beyond the edge of the document is visually distinct from the document.	At least paragraphs 0151; and Figures 7 and 8C.	At least paragraph 0152; and Figures 7 and 8C.	At least paragraph 0125; and Figures 7 and 8C.	At least paragraph 0125; and Figures 7 and 8C.
15. The computer- implemented method of claim 1, wherein translating the document in the second direction is a damped motion.	At least paragraph 0152; and Figure 7.	At least paragraph 0153; and Figure 7.	At least paragraph 0126; and Figure 7.	At least paragraph 0126; and Figure 7.

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
16. The computer-	At least paragraph	At least paragraph	At least paragraph	At least paragraph
implemented method of	0152; and Figures 7	0153; and Figures 7	0126; and Figures 7	0126; and Figures 7
claim 1, wherein changing	and 8A-8D.	and 8A-8D.	and 8A-8D.	and 8A-8D.
from translating in the first				
direction to translating in				
the second direction until				
the area beyond the edge of				
the document is no longer				
displayed makes the edge				
of the electronic document				
appear to be elastically				
attached to an edge of the				
touch screen display or to				
an edge displayed on the				
touch screen display.				

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
17. The computer-	At least paragraph	At least paragraph		
implemented method of	0153; and Figure 8C.	0154; and Figure 8C.		
claim 1, wherein translating				
in the first direction prior to				
reaching the edge of the				
electronic document has a				
first associated translating				
distance that corresponds to				
a distance of movement of				
the object prior to reaching				
the edge of the electronic				
document; and wherein				
displaying an area beyond				
the edge of the electronic				
document comprises				
translating the electronic				
document in the first				
direction for a second				
associated translating				
distance, wherein the				
second associated				
translating distance is less				
than a distance of				
movement of the object				
atter reaching the edge of				
the electronic document.				

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application
10 1		claims benefit	claims benefit	claims benefit
18. The computer-	At least paragraph	At least paragraph		
implemented method of	0154; and Figure 8C.	0154; and Figure 8C.		
claim I, wherein translating				
in the first direction prior to				
reaching the edge of the				
first associated translating				
speed that corresponds to a				
speed of movement of the				
object, and wherein				
displaying an area beyond				
the edge of the electronic				
document comprises				
translating the electronic				
document in the first				
direction at a second				
associated translating				
speed, wherein the second				
associated translating speed				
is slower than the first				
associated translating				
speed.				

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
19. A device, comprising:	At least paragraphs	At least paragraphs	At least paragraphs	At least paragraphs
	0012 and 0103; and	0013 and 0104; and	0013 and 0082; and	0013 and 0082; and
	Figure 2.	Figure 2.	Figure 2.	Figure 2.
a touch screen display;	At least paragraphs	At least paragraphs	At least paragraphs	At least paragraphs
	0012 and 0103; and	0013 and 0104; and	0013 and 0082; and	0013 and 0082; and
	Figure 2.	Figure 2.	Figure 2.	Figure 2.
one or more processors;	At least paragraphs	At least paragraphs	At least paragraphs	At least paragraphs
	0012 and 0059; and	0013 and 0060; and	0013 and 0038; and	0013 and 0038; and
	Figure 1.	Figure 1.	Figure 1.	Figure 1.
memory; and	At least paragraphs	At least paragraphs	At least paragraphs	At least paragraphs
	0012 and 0061; and	0013 and 0062; and	0013 and 0040; and	0013 and 0040; and
	Figure 1.	Figure 1.	Figure 1.	Figure 1.
one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the programs including:	At least paragraph 0012; and Figure 1.	At least paragraph 0013; and Figure 1.	At least paragraph 0013; and Figure 1.	At least paragraph 0013; and Figure 1.
instructions for detecting a movement of an object on or near the touch screen display;	At least paragraphs 0012 and 0148; and Figures 7 and 8A-8D.	At least paragraphs 0013 and 0149; and Figures 7 and 8A-8D.	At least paragraphs 0013 and 0122; and Figures 7 and 8A-8D.	At least paragraphs 0013 and 0122; and Figures 7 and 8A-8D.

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
instructions for translating an electronic document displayed on the touch screen display in a first direction, in response to detecting the movement;	At least paragraphs 0012 and 0149; and Figures 7 and 8A-8D.	At least paragraphs 013 and 0150 and claims 1- 2; and Figures 7 and 8A-8D.	At least paragraphs 013 and 0123 and claims 1- 2; and Figures 7 and 8A-8D.	At least paragraphs 013 and 0123 and claims 1- 2; and Figures 7 and 8A-8D.
instructions for displaying an area beyond an edge of the electronic document in response to the edge of the electronic document being reached while translating the electronic document in the first direction while the object is still detected on or near the touch screen display; and	At least paragraphs 0012 and 0151; and Figures 7 and 8A-8D.	At least paragraphs 013 and 0152 and claims 1- 2; and Figures 7 and 8A-8D.	At least paragraphs 013 and 0125 and claims 1- 2; and Figures 7 and 8A-8D.	At least paragraphs 013 and 0125 and claims 1- 2; and Figures 7 and 8A-8D.

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
instructions for translating	At least paragraphs	At least paragraphs 013	At least paragraphs 013	At least paragraphs 013
the document in a second	0012 and 0152; and	and 0153 and claims 1-	and 0126 and claims 1-	and 0126 and claims 1-
direction until the area	Figures 7 and 8A-8D.	2; and Figures 7 and	2; and Figures 7 and	2; and Figures 7 and
beyond the edge of the		8A-8D.	8A-8D.	8A-8D.
document is no longer				
displayed, after the object is				
no longer detected on or				
near the touch screen				
display.				
20. A computer readable	At least paragraph	At least paragraph	At least paragraph	At least paragraph
storage medium having	0013; and Figure 1.	0014; and Figure 1.	0014; and Figure 1.	0014; and Figure 1.
stored therein instructions,				
which when executed by a				
device with a touch screen				
display, cause the device to:				
detect a movement of an	At least paragraphs	At least paragraphs	At least paragraphs	At least paragraphs
object on or near the touch	0013 and 0148; and	0014 and 0149 and	0014 and 0122 and	0014 and 0122 and
screen display;	Figures 7 and 8A-8D.	claims 1-2; and Figures	claims 1-2; and Figures	claims 1-2; and Figures
		7 and 8A-8D.	7 and 8A-8D.	7 and 8A-8D.
translate an electronic	At least paragraphs	At least paragraphs 014	At least paragraphs 014	At least paragraphs 014
document displayed on the	0013 and 0149; and	and 0150 and claims 1-	and 0123 and claims 1-	and 0123 and claims 1-
touch screen display in a	Figures 7 and 8A-8D.	2; and Figures 7 and	2; and Figures 7 and	2; and Figures 7 and
first direction, in response		8A-8D.	8A-8D.	8A-8D.
to detecting the movement;				

Claim Limitation	Support for claim limitation in the above captioned patent application	Support for claim limitation in provisional application no. <u>60/946,971</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/945,858</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/883,801</u> , to which the above captioned application claims benefit
display an area beyond an	At least paragraphs	At least paragraphs 014	At least paragraphs 014	At least paragraphs 014
edge of the electronic	0013 and 0151; and	and 0152 and claims 1-	and 0125 and claims 1-	and 0125 and claims 1-
document if the edge of the	Figures / and 8A-8D.	2; and Figures / and	2; and Figures / and	2; and Figures / and
electronic document is		8A-8D.	8A-8D.	8A-8D.
the electronic document in				
the first direction while the				
object is still detected on or				
near the touch screen				
display; and				
translate the document in a	At least paragraphs	At least paragraphs 014	At least paragraphs 014	At least paragraphs 014
second direction until the	0013 and 0152; and	and 0153 and claims 1-	and 0126 and claims 1-	and 0126 and claims 1-
area beyond the edge of the	Figures 7 and 8A-8D.	2; and Figures 7 and	2; and Figures 7 and	2; and Figures 7 and
document is no longer		8A-8D.	8A-8D.	8A-8D.
displayed, after the object is				
no longer detected on or				
near the touch screen				
display.				

Showing of Support under 35 USC 112, First Paragraph (continued):

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
1. A computer- implemented method, comprising:	At least claims 318 and 319; and Figures 43B-43D.	At least claims 318 and 319; and Figures 43B-43D.	At least claims 303 and 304; and Figures 43B-43D.
at a device with a touch screen display,	At least paragraph 0756; and Figure 2.	At least paragraph 0724; and Figure 2.	At least paragraph 0703; and Figure 2.
detecting a movement of an object on or near the touch screen display;	At least paragraph 0761; and Figures 43B-43D.	At least paragraph 0729; and Figures 43B-43D.	At least paragraph 0708; and Figures 43B-43D.
in response to detecting the movement, translating an electronic document displayed on the touch screen display in a first direction;	At least paragraph 0762; and Figures 43B-43D.	At least paragraph 0730; and Figures 43B-43D.	At least paragraph 0709; and Figures 43B-43D.
in response to an edge of the electronic document being reached while translating the electronic document in the first direction	At least paragraph 0537; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
while the object is still detected on or near the touch screen display, displaying an area beyond the edge of the document; and	At least paragraph 0537; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.
after the object is no longer detected on or near the touch screen display, translating the document in a second direction until the area beyond the edge of the document is no longer displayed.	At least paragraph 0537; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.
2. The computer- implemented method of claim 1, wherein the device is a portable multifunction device.	At least paragraph 0003; and Figures 2 and 4A-4B.	At least paragraph 0003; and Figures 2 and 4A-4B.	At least paragraph 0003; and Figures 2 and 4A-4B.
3. The computer- implemented method of claim 1, wherein the movement of the object is on the touch screen display.	At least paragraph 0761; and Figures 43B-43D.	At least paragraph 0729; and Figures 43B-43D.	At least paragraph 0708; and Figures 43B-43D.

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
4. The computer-	At least claims 318 and 319; and	At least claims 318 and 319;	At least claims 303 and 304; and
implemented method of	Figures 43B-43D.	and Figures 43B-43D.	Figures 43B-43D.
claim 1, wherein the object			
is a finger.			
5. The computer-	At least paragraph 0762.	At least paragraph 0730.	At least paragraph 0709.
implemented method of			
claim 1, wherein the first			
direction is a vertical			
direction, a horizontal			
direction, or a diagonal			
direction.			
6. The computer-	At least paragraph 0756.	At least paragraph 0724.	At least paragraph 0703.
implemented method of			
claim 1, wherein the			
electronic document is a			
web page.			
7. The computer-	At least paragraph 0243.	At least paragraph 0237.	At least paragraph 0237.
implemented method of			
claim 1, wherein the			
electronic document is a			
digital image.			

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
8. The computer-	At least paragraph 0756.	At least paragraph 0724.	At least paragraph 0703.
implemented method of			
claim 1, wherein the			
electronic document is a			
word processing,			
spreadsheet, email or			
presentation document.			
9. The computer-	At least paragraph 0537; and	At least paragraph 0518; and	At least paragraph 0518; and
implemented method of	Figures 43B-43D.	Figures 43B-43D.	Figures 43B-43D.
claim 1, wherein the			
electronic document			
includes a list of items.			
10. The computer-	At least paragraph 0537; and	At least paragraph 0518; and	At least paragraph 0518; and
implemented method of	Figures 43B-43D.	Figures 43B-43D.	Figures 43B-43D.
claim 1, wherein the second			
direction is opposite the			
first direction.			
11. The computer-	At least paragraph 0762.	At least paragraph 0730.	At least paragraph 0709.
implemented method of			
claim 1, wherein translating			
in the first direction prior to			
reaching an edge of the			
document has an associated			
speed of translation that			
corresponds to a speed of			
movement of the object.			
Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. $60/879,253$, to which the above captioned application claims benefit
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12. The computer-	At least paragraph 0762.	At least paragraph 0730.	At least paragraph 0709.
implemented method of			
claim 1, wherein translating			
in the first direction is in			
accordance with a			
simulation of an equation			
of motion having friction.			
13. The computer-	At least paragraph 0537; and	At least paragraph 0518; and	At least paragraph 0518; and
implemented method of	Figures 43B-43D.	Figures 43B-43D.	Figures 43B-43D.
claim 1, wherein the area			
beyond the edge of the			
document is black, gray, a			
solid color, or white.			
14. The computer-	At least paragraph 0537; and	At least paragraph 0518; and	At least paragraph 0518; and
implemented method of	Figures 43B-43D.	Figures 43B-43D.	Figures 43B-43D.
claim 1, wherein the area			
beyond the edge of the			
document is visually			
distinct from the document.			
15. The computer-	At least paragraph 0537; and	At least paragraph 0518; and	At least paragraph 0518; and
implemented method of	Figures 43B-43D.	Figures 43B-43D.	Figures 43B-43D.
claim 1, wherein translating			
the document in the second			
direction is a damped			
motion.			

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
16. The computer-	At least paragraph 0537; and	At least paragraph 0518; and	At least paragraph 0518; and
implemented method of	Figures 43B-43D.	Figures 43B-43D.	Figures 43B-43D.
claim 1, wherein changing			
from translating in the first			
direction to translating in			
the second direction until			
the area beyond the edge of			
the document is no longer			
displayed makes the edge			
of the electronic document			
appear to be elastically			
attached to an edge of the			
touch screen display or to			
an edge displayed on the			
touch screen display.			

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
17. The computer-			
implemented method of			
claim 1, wherein translating			
in the first direction prior to			
reaching the edge of the			
electronic document has a			
first associated translating			
distance that corresponds to			
a distance of movement of			
the object prior to reaching			
the edge of the electronic			
document; and wherein			
displaying an area beyond			
the edge of the electronic			
document comprises			
translating the electronic			
document in the first			
direction for a second			
associated translating			
distance, wherein the			
second associated			
translating distance is less			
than a distance of			
movement of the object			
after reaching the edge of			
the electronic document.			

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
18. The computer-			
implemented method of			
claim 1, wherein translating			
in the first direction prior to			
reaching the edge of the			
electronic document has a			
first associated translating			
speed that corresponds to a			
speed of movement of the			
object, and wherein			
displaying an area beyond			
the edge of the electronic			
document comprises			
translating the electronic			
document in the first			
direction at a second			
associated translating			
speed, wherein the second			
associated translating speed			
is slower than the first			
associated translating			
speed.			
19. A device, comprising:	At least paragraph 0084 and	At least paragraph 0083 and	At least paragraph 0083 and
	claim 338; and Figures 1A-1B.	claim 338; and Figures 1A-1B.	claim 322; and Figures 1A-1B.
a touch screen display;	At least paragraph 0084; and	At least paragraph 0083; and	At least paragraph 0083; and
	Figures 1A-1B.	Figures 1A-1B.	Figures 1A-1B.

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
one or more processors;	At least paragraph 0084; and Figures 1A-1B.	At least paragraph 0083; and Figures 1A-1B.	At least paragraph 0083; and Figures 1A-1B.
memory; and	At least paragraph 0084; and Figures 1A-1B.	At least paragraph 0083; and Figures 1A-1B.	At least paragraph 0083; and Figures 1A-1B.
one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the programs including:	At least paragraph 0104; and Figures 1A-1B.	At least paragraph 0103; and Figures 1A-1B.	At least paragraph 0103; and Figures 1A-1B.
instructions for detecting a movement of an object on or near the touch screen display;	At least paragraph 0761; and Figures 43B-43D.	At least paragraph 0729; and Figures 43B-43D.	At least paragraph 0708; and Figures 43B-43D.
instructions for translating an electronic document displayed on the touch screen display in a first direction, in response to detecting the movement;	At least paragraph 0762; and Figures 43B-43D.	At least paragraph 0730; and Figures 43B-43D.	At least paragraph 0709; and Figures 43B-43D.

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
instructions for displaying an area beyond an edge of the electronic document in response to the edge of the electronic document being reached while translating the electronic document in the first direction	At least paragraph 0537; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.
while the object is still detected on or near the touch screen display; and	At least paragraph 0537; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.
instructions for translating the document in a second direction until the area beyond the edge of the document is no longer displayed, after the object is no longer detected on or near the touch screen display.	At least paragraph 0537; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.
20. A computer readable storage medium having stored therein instructions, which when executed by a device with a touch screen display, cause the device to:	At least claim 339; and Figures 1A-1B.	At least claim 339; and Figures 1A-1B.	At least claim 323; and Figures 1A-1B.

Claim Limitation	Support for claim limitation in patent application no. <u>60/937,993</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,469</u> , to which the above captioned application claims benefit	Support for claim limitation in provisional application no. <u>60/879,253</u> , to which the above captioned application claims benefit
detect a movement of an object on or near the touch screen display;	At least paragraph 0761; and Figures 43B-43D.	At least paragraph 0729; and Figures 43B-43D.	At least paragraph 0708; and Figures 43B-43D.
translate an electronic document displayed on the touch screen display in a first direction, in response to detecting the movement;	At least paragraph 0762; and Figures 43B-43D.	At least paragraph 0730; and Figures 43B-43D.	At least paragraph 0709; and Figures 43B-43D.
display an area beyond an edge of the electronic document if the edge of the electronic document is reached while translating the electronic document in the first direction	At least paragraph 0537; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.
while the object is still detected on or near the touch screen display; and	At least paragraph 0537; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.
translate the document in a second direction until the area beyond the edge of the document is no longer displayed, after the object is no longer detected on or near the touch screen display.	At least paragraph 0537; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.	At least paragraph 0518; and Figures 43B-43D.

Thus, as shown in the table above, claims 1-20 satisfy the requirements of 35 U.S.C. §112, first paragraph.

The claims do not invoke 35 USC 112, sixth paragraph. There are no means- (or step-) plus-function claim elements.

Identification of References Disqualified as Prior Art under 35 USC 103(c):

The following references are disqualified as prior art under 35 USC 103(c):

1. Lemay et al	US 20070157094
2. Ording et al	US 20070152984
3. Jobs et al	US 20070152979
4. Kocienda et al	US 20070152978
5. Jobs et al	US 20070155434
6. Chaudhri et al	US 20070150842

Applicants respectfully submit that the claims of the above-captioned patent application are in condition for allowance, and respectfully request that the Examiner allow the claims of the above-captioned application to issue in a U.S. patent.

Respectfully submitted,

Date: April 30, 2008

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(Reg. No.)



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PersonalJava Application Environment

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Introduction

A look and feel design represents the visual appearance and behavior of a graphical user interface (GUI) component set. The "look" is based on the visual design characteristics shared with the GUI component set. The "feel" is based on the input mechanisms that the GUI component set provides for the user to interact. Look and feel designs vary according to the needs of the underlying product and the target user. Forcing consistency across radically different products results in unusable products.

This document focuses on the Touchable look and feel, a specific look and feel designed for touch screen based consumer products, including retail kiosks, personal digital assistants (PDAs), and screen phones. The main objectives of the Touchable look and feel are twofold: (1) to provide developers with a good starting point for a touch screen based consumer product look and feel, and (2) to provide a look and feel that is usable for consumers.

This document discusses the advantages of using the Touchable look and feel on touch screen based consumer products. The first section focuses on the experience and expectations of the target user. The next section details the nature of the target products and how these products differ significantly from traditional desktop computers. The final section describes some of the design approaches and extensive usability evaluations conducted in producing the Touchable look and feel, along with some of the lessons learned from the process.

For a more detailed discussion on designing human interfaces for consumer products, refer to the forthcoming Consumer Products User Experience Style Guide.

The Consumer

When developing a product, it is important to keep in mind both the experience and expectations of the target user. The target user for the Touchable look and feel is the consumer. Consumers include people without any experience with personal computers. These users probably have experience with consumer electronics devices and they expect software-enabled consumer electronics devices to operate and behave consistently with their solid-state predecessors. Even people with computer experience have very different expectations when dealing with a consumer product than they do when dealing with a computer at work.

Experience

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Statistics for the United States show that around 50-60% of households do not have a personal computer. The number of households with a personal computer is rising, but it will be a number of years before most households have a personal computer. Interestingly, the number of households with personal computers has remained fairly stable for the last few years. The belief is that it is more likely that consumer products, such as screen phones or internet-enhanced televisions, will appear in the remaining households before a personal computer does.

Of those consumers who do have a personal computer at home, the applications used most frequently are word processors and personal finance applications (e.g., Quicken). In addition, compared to business or enterprise computer users, consumers typically performless complex tasks on the computer, use the computer less hours per day, and know fewer applications well.

While it is true that children are being increasingly exposed to personal computers in school, this does not always translate to the same kind of computer applications or tasks as used by business or enterprise users. Many schools employ software designed specifically for children, which is less complex than typical productivity applications.

The implications of these characteristics are many. It can be assumed that most consumers have used a telephone, the younger ones may have used a game machine like a Nintendo or Playstation, and most have watched television, used a remote control, and probably used a VCR. Some consumers may even have programmed a VCR, though this is more common in the younger part of the population. These users have also used control panels on microwaves, answering machines, and stereos.

Expectations

Not surprisingly, consumers who are unfamiliar with desktop computers may feel uncomfortable dealing with anything they consider to be too "high tech" and tend to be unwilling to learn complex interaction models. Those consumers who do have computer experience often have very different expectations when dealing with a consumer product than they do when dealing with a computer at work. Business users who regularly use a cell phone expect to be able to pick up the phone and dial a call in seconds. When has a personal computer ever booted up in seconds? Additionally, people who have participated in some of our consumer studies have voiced the sentiment that even if they are fairly computer literate, they do not want to take the "lingo" from the office to the home.

Furthermore, within the consumer domain itself, expectations differ depending upon the user's generation, sex, class, and education. All of these types of factors should be considered during the development of the product.

While electronic appliances such as televisions, VCRs, telephones, and microwave ovens are common today, widespread acceptance is hardfought. Eight out of ten consumer products fail in the marketplace, often because consumers find them too difficult to use. Modern consumers have little patience for learning how to operate new products. They expect the interfaces to be self-evident. Most consumers simply will not buy a product if they believe it might be hard to use.

In short, consumers expect products to be easy to figure out and fun to use. Such expectations affect response time, the complexity of applications, the plastic of the product, the choice of colors, and many other aspects of a consumer product. The result? A marketplace where success is equated to simple, slick design. Design that inspires consumers to pick up the product and play with it. Products that come in all shapes and sizes and colors, for children, teenagers, and adults alike.

The Touchable Look and Feel: What Makes it Different?

This section details some of the main considerations that affected the development of the Touchable look and feel, and how these considerations differ for a look and feel targeted for touch screen based consumer products compared to typical desktop look and feel designs. It is important to keep in mind that there are similar differences, though maybe not as radical, within the consumer product area itself.

Modification

Consumer products are tightly integrated and reflect a careful balance between several competing design criteria. Specifically, the level of integration between the software and the hardware (i.e., the actual plastic) must be very high. The color of the physical components (e.g., plastics, buttons, bezels, etc.) must be coordinated with the colors on the display. The shape of the physical buttons on the plastic should be integrated with the shape of the buttons on the screen.

The Touchable look and feel is a reference design only. It represents a framework from which a variety of derivative look and feel designs are possible. A main consideration in the development of the Touchable look and feel was to ensure that it can easily be modified to support the product identity or product design needs of device manufacturers. For a more detailed discussion of how to modify the Touchable look and feel, refer to the Truffie Customization Guide.

Scalability

The Touchable look and feel is targeted for products containing a variety of different display sizes. For example, the display size on a retail kiosk is likely to be larger than the display size on a screen phone, which in turn is likely to be larger than the display size on a PDA. As a result, the look and feel is designed to scale gracefully. This is in direct contrast with desktop look and feel designs, where there is less variance in display size, and therefore scalability is not as important.

The Touchable look and feel started with a working target of a640"x480", 100 dots per inch (dpi), color touch LCD. Finger input was used as the starting point because, compared to stylus input, finger input requires more adjustments to the look and feel due mostly to target size issues. Figure 1 shows an example of some of the Touchable look and feel widgets in the context of an email application. Figures 2 and 3 show the same widgets scaled down to 75% and 50%, respectively.

3 new unread messages

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Figure 1: A 640" x 480", 100 dpi, full scale sample of the list, choice menu, and button widgets from the Touchable look and feel in the context of an email application.

Email	V Inne	8 new unread messag	ges.
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Figure 2: A sample of some of the widgets from the Touchable look and feel in the context of an email application, scaled down to 75%.

Email	/ Intra	8 new unread	messages
Annaŭ	onnelly	Hi What's new with you?	10/6
Thoma	sSollenberg	Re: Dinner saturcay	10/7
Samua	Carter	See you're San francisco	10/8
(and y	Vilhore	socierschedure	10/9
Ect Sn	um	ie socerscheade	10/0
Susan	e Greene	ie soverschedde	10/9
Micte	i shoemak ei	for the kids	10/9
Marx G	ram te	latestabletas	10/9
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Figure 3: A sample of some of the widgets from the Touchable look and feel in the context of an email application, scaled down to 50% and rotated to vertical. Notice the modified button shape and placement of the scroll buttons.

Color Schemes

The color schemes are different in the Touchable look and feel than they are in a typical desktop look and feel. In general, consumers dislike gray scale. In user studies, color schemes that resembled desktop computer look and feel designs received the lowest ratings from the participants (see Figure 4).Instead, consumers prefer bright, cheerful colors. Figure 6 shows the color

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scheme that received the highest ratings from the participants in the user study.

Note: Only a sense of the color schemes can be gathered from the figures included in this section. The colors appear extremely different on an LCD display.

Main Address Book					
Last Name: <u>Duke</u>	First	Name:	•••••••••••••••••••••••••••••••••••••••		
Title: Dearly Loved Mascot	******	<u>M</u>]		
Company: <u>Consumer Embedded,</u>	Sun	Work	ns.lnc		
(408) 123-3456	V	Fage	[A
(650) 333-9988		Mobile			
A Market Market and A	*		********	321 (1110) 321 (1110)	
Notes: This is the place you ca	an pi	Email	00		
about birthdays, anni	versa	¥	Jer		
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Figure 4: This predominantly gray scale color scheme received low ratings from consumers.

Last Name: .	Duke	First Na	me:		•••••••••••••••••••••••••••••••••••••••	
Title:	Dearly Loved Mascot		<u>a</u>]		
Company:	Consumer Embedded.	Sun V	/ork	ns.inc	<	****
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Figure 5: This yellow/blue color scheme received the highest ratings from consumers.

Additionally, participants in the user study desired the ability to set the color scheme on the product. Color schemes should be

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targeted to age groups: what works for a child will not work for an adult. Color preference also differs according to sex: what works for a 7-year old boy may not work for a 7-year old girl; likewise a female adult prefers different color schemes than a male adult. The Touchable look and feel provides alternate color palettes from which to choose.

Alternate Input Mechanisms

As discussed, the Touchable look and feel is targeted for use on touch screen based consumer products. On such products, typically a finger or a stylus is used for input, resulting in the following implications for the look and feel:

* No pointer or cursor is shown on the screen

The pointer/cursor model of graphical user interface has become common in computer desktops. It was originally developed to provide a mechanism for allowing a user to control graphical elements in a computer display (e.g., pressing a button on the interface by moving the mouse over the button and pressing the physical button on the mouse).

This model is not necessary in a touch screen based look and feel for two reasons: (1) the touch screen hardware allows a user to directly manipulate an object on the display, and (2) a mouse adds bulk and complexity. The arrow pointer used on desktop computer systems is out of place on a touch screen. Users try to make the arrow move to the right place instead of just touching an element. Paying attention to the arrow pointer makes the entire system seem much harder to use than it really is. The pointer is unnecessary because the direct interaction model simply does not require it. The current position is wherever the user places his/her finger.

(Note: The only exception to this in the Touchable look and feel is the text insertion point, which is not a cursor.)

No focus highlight

Many desktop computers use a focus highlight graphic to indicate which human interface element has keyboard focus. The graphic is usually displayed as a rectangle drawn around an element. This rectangle can be very distracting to a consumer user and is unneeded on most touch input consumer devices.

(Note: The Touchable look and feel does include focus highlight, however the default is to have it turned off.)

* A single tap interaction model is common

It is actually quite hard to tap twice in the same spot with a finger. Fingers inherently jitter. Given the error-prone nature of fingers and touch input with regard to tapping, double-tapping should be avoided.

* Components execute on finger-up rather than on finger-down

In general, most human interface components, like button or choice menu, will show a state change upon finger-down. The state change may be a simple highlight. Upon finger-up, the operation associated with the component is executed. For example, upon finger-down a choice menu button will highlight and upon finger-up, the choice menu will be displayed.

Additionally, an input is only registered if the user lets his/her finger up over the original target (i.e., the same target as the one the finger went down on). If the user touches (i.e., finger-down) on a target and then drags his/her finger out of a target then the target returns to a neutral state. That is, finger-up outside of the original target serves as a cancel, even if the finger is dragged over another legal target.

* Components must be much large enough for finger input

A finger is neither small nor accurate. If the user is expected to use a finger as the input device, then all of the user interface elements must be large enough to accommodate this. The size of desktop computer elements is far too small. For example, on displays with a resolution of ~100 dpi, the minimum height of a button should be no smaller than 36 pixels in order to accommodate the full range of adult sized fingers.

Low Resolution & Small Displays

Compared to desktop computers, the lower resolution and smaller displays of consumer products also have several implications for the look and feel, including:

Use of color

The color LCD has a big effect on the Touchable look and feel design because of the differences in how color is displayed. Not only is color displayed differently on a color LCD compared to a CRT, but color is affected by the specific LCD as well. For example, on some LCDs the saturation level of red is much lower than expected, resulting in the inability to show certain colors, such as violet. Furthermore, subtle color differences may not be apparent to the eye on LCDs, thereby limiting the available shades of gray and requiring the use of high contrast colors. As a result, there is a limit on the variety of color palettes provided with the Touchable look and feel. Viewing the palettes on a typical personal computer display is not a good idea. (Note: The actual LCD on which the look and feel is displayed will directly affect how the colors are displayed. The color palettes included with the Touchable look and feel were tuned for a specific type ! ! of LCD. Developers are encouraged to tune the colors for their own LCDs.)(For a more detailed discussion on this topic, refer to the Design Language section in the forthcoming Consumer Products User Experience Style Guide.)

* Rendering time

Given the small size of the display and the performance typical of these products, the human interface elements on the screen have to take rendering time into consideration when they are designed. The Touchable look and feel is deliberately a simple look with few outlines or other excess graphic bits. This is advantageous because the look is both fast to render and simple, and therefore less intimidating to consumers.

Typeface

The style of typeface recommended to work with the Touchable look and feel is a sans-serif condensed typeface. The recommended size for a 640" x 480", 100 dpi display is 24 point for finger input of adults (see Figure 1). A sans-serif condensed typeface is recommended because of space considerations on small displays.

Component Design in Consumer Products

The first release of the Touchable look and feel includes the minimum required set of AWT components from the <u>PersonalJava</u> technology API specification. Components such as overlapping windows, modeless dialogs, hierarchical menus, and scroll bars are considered optional in the PersonalJava API specification and are not supported at this time, though future releases may support some of these components. Many of the unsupported components and their related concepts have been shown to be hard to learn, difficult to understand, and generally too complex for consumer products.

A few examples of desktop concepts that typically cause problems for consumers are included below. For a more detailed discussion of the Desktop Concepts: Do's and Don'ts refer to the forthcoming Consumer Products User Experience Style Guide.

Multiple Overlapping Windows

Multiple overlapping windows are very confusing to consumers with no desktop computer experience and require a much steeper learning curve than is appropriate for most consumer products. They assume the presence of a windowing system and a method for the user to manipulate or manage windows, neither of which is common or necessary in consumer products. In addition, the display size of consumer products is typically much smaller than that of a personal computer display, leading to insufficient space for multiple overlapping windows.

The basic human interface problem with multiple overlapping windows is cognitive load on the user. Multiple overlapping windows require users to learn and then use various interaction methods to resize, move, scroll, and so on. The collection of extra knowledge that the user must learn and use puts a cognitive burden on the user that is inappropriate given the simple specialized nature of most consumer products.

In addition to having to learn how to manage windows, the inherent reason a computer system has multiple windows is so that multiple applications can be running simultaneously. Ignoring the fact that many consumer products do not have the memory to support multiple applications, forcing a user to interact with multiple applications at a time places another cognitive load on the user. While the operating system and other system infrastructure may need to support multi-tasking, users should not be exposed to it in the personal computer sense.

Double Clicking

Double clicking an icon on a personal computer is a shortcut for selecting the icon and choosing the Open command from the File menu to open the icon. It should never be used as a primary method for an operation even on a desktop computer. Most consumer products do not have a mouse or any device that provides for double clicking. Even when consumer products do have a pointing device, it may inadvertently move between clicks causing the system to interpret the double click as two single clicks. Moreover, users with common medical conditions like arthritis or Repetitive Stress Syndrome (RSI) may be even less tolerant of double clicking in a consumer environment than in a desktop environment.

Double tapping on a touch screen presents further problems because people do not consistently hit the same spot on the screen twice in rapid succession. What the user meant as a double tap may get parsed by the input handler as two discrete single taps,

and then the user sees the software do the wrong thing twice instead of the right thing once.

Scroll bars

Scroll bars were originally designed for viewing documents on a personal computer; the bar gave an indication of how much of the document was visible. The document model is one of the main concepts of the personal computer human interface as creating and editing documents are two of the main tasks on personal computers. Consumer products rarely allow users to do more than create and send an email or fill in an address book entry. Users do not typically view either of these items as a *document* in the personal computer sense.

The bar portion of the scroll bar is very confusing to people with no computer experience. Because they usually have little experience with the concept of documents on a personal computer, they do not readily understand what the bar represents. In addition, the thumb, or elevator, in a scroll bar can be very difficult to manipulate with the limited input devices available on consumer products.

The Process Behind the Touchable Look and Feel Design

This section describes some of the design approaches and lessons learned from the extensive usability evaluations conducted in developing the Touchable look and feel.

The Iterative Design and Evaluation Process

It can be argued that an iterative design and evaluation process is even more crucial when designing products for novice computer users than it is when designing for more experienced computer users. In no way should such a statement insinuate that iterative design and evaluation should not play a central role in the desktop computer market. However, when designing for computer users, assumptions can be made regarding their behavior based on their knowledge of the conventions used in the desktop world. On the other hand, consumers include novice computer users who may have had little, if any, exposure to computer conventions, and consequently few assumptions can be made with regard to how they will behave. Once a good intuitive model for what a user expects and how a user behaves is obtained, the designer can develop designs more directly, with less iteration.

The needs and expectations of consumers were taken into account throughout the development process of the Touchable look and feel. At the same time, the goal was to understand the needs and requirements of developers. A fair amount of time was spent working closely with software engineers, learning about their business, and evaluating existing products on the market.

The development process for the Touchable look and feel involved several design iterations. The process began with the creation of the basic elements or building blocks from which other more complex components could be built. The next step was to iterate the designs of the components until patterns started to emerge. Two sets of design rules emerged during the design process: (1) rules that had to do with how elements were laid out, internally within a component as well as with regard to other components, and (2) rules dealing with how color was used, how many colors, and what color mapped onto in the elements.

Other tools that were used during the design process included a demo that mimicked possible screen phone applications and made use of all of the Touchable look and feel components, as well as a set of tests created to display the widgets and test out edge cases. Additionally, the designer working on the Touchable look and feel created sample application screens based on the consumer application work of the other designers in the company, and held regular design reviews with peers.

The first release of the Touchable look and feel went through five rounds of user testing with consumers who had little or no personal computer experience. Although the intended user population for the Touchable look and feel varies broadly with regard to their level of computer experience, the focus during the user evaluations was predominantly on those users with less experience in order to ensure that the design accommodated their needs. The data from the user testing was tightly integrated into the look and feel design. Touch monitors and a color touch LCD were used throughout the design and evaluation process.

Lessons Learned from the Evaluation Process

During the user evaluations, valuable feedback was collected regarding the usability of the components. Some of the lessons learned through the many hours of user testing are shared below:

Finger Input

Users are very inconsistent with regard to which finger they use. Many times they will change the finger or even the hand being used to tap on the screen. Users also do not tap with a consistent area of the finger. They tap with the tip or the side of their finger, roll their finger, place their finger sideways or straight up, and just about every other possible contortion. Long fingernails are another source of trouble, as users can inadvertently tap on two items if the nail is too long: one item with the pad of their finger

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and the second as the finger is raised and the nail contacts the screen. In addition, a finger inherently jitters and can accidentally produce double clicks. When users are frustrated with something on the screen they will sometimes tap repeatedly and very quickly on an element.

Furthermore, it was commonly observed that users touch lower on an element than they would with a mouse pointer. This is most likely due to the fact that the finger obscures the thing the user is touching. Consequently, users touch lower to make sure they are touching the correct element. This effect is more pronounced with finger input as compared to stylus input. These observations directly impacted the design of the widgets. Specifically, the following guideline was adhered to for each of the widgets: *Once the appropriate width constraints are met, the height of the element becomes critical to ensure error-free operation by users.*

Active Labels

Another observation from the user evaluations was that when using checkboxes, radio buttons or text fields, users touched on either the actual object (i.e., checkbox, radio button, or text field) or on the object's label and expected both to operate the component. When using finger input, being able to select the object and its label makes the target area that much larger, which is a distinct advantage.

Labels are usually part of the checkbox and radio button components in toolkits. Text fields do not have labels as part of the component. The additional work to tie the label and text field together makes the operation of the product less error prone and more user friendly.

Scroll Feedback

For reasons already discussed, the Touchable look and feel does not contain a scroll bar widget. However, the issue remains that users need feedback to tell them if there is more information to scroll to or not, and if they are at the top or the bottom of a list or text area.

In developing the Touchable look and feel, visual cues to replace the feedback that a scroll bar would give a user were iteratively explored, implemented, and tested. The resulting design incorporates redundant feedback in the form of scroll arrows, clipping of items, and blank spaces at the top and bottom of a list to provide feedback as to whether the user is at the top, bottom, or middle of a list or text area.

When the scrolling list is at the top (see Figure 6), there is a half-space left blank to tell users they are at the top. If there is more information to scroll to, then the last item is shown clipped in half. In addition, the scroll buttons are enabled or disabled appropriately for each state. When the list is somewhere in the middle (see Figure 7), the text is shown clipped on the top and the bottom of the visible list. When the list is at the bottom (see Figure 8), the half space is at the bottom and the upper item is clipped.



Figure 6: Scrolling list at the top. Half-space left blank at the top of the list. Bottom item is clipped. Scroll-up button is disabled.



Figure 7: Scrolling list in the middle. Items at the top and bottom are clipped. Both scroll buttons are enabled.



Figure 8: Scrolling list at the bottom. Half-space left blank at the bottom of the list. Top item is clipped. Scroll-down button is disabled.

The scrolling feedback within the list and text area widgets proved extremely successful during the user evaluations. So successful, in fact, that it was applied to scrolling in the choice menu widget as well.

A general lesson that can be learned from the design of the scrolling feedback is to build redundancy into the interface. Each of the visual cues by themselves may or may not have been enough of a cue to signal the scroll state of the list or text area. However, taken together, the cues succeeded in signaling the state to practically all of the participants in the user evaluations.

Choice Menu

One of the components that was extremely difficult to design, and that went through a series of redesign phases, was the choice menu. This is a component that is very dynamic. The size of the component is dependent upon what items are in it. Where it pops up and whether it is scrollable is dependent upon the screen real estate around it. This component can be confusing to a user who has never seen one. The goal was to make the component as easy to understand as possible given the constraints.

A choice menu has two parts. One part is the menu button which is the element from which the menu originates. The other part is the menu itself. There are three states the menu button can have: enabled, disabled, and selected. The menu supports scrolling if there is not enough room to display all of the items. Figure 9 shows one of the original designs of the choice menu.



Figure 9: One of the original designs of the choice menu.

One thing the original design of the widget had not taken completely into account was the situation in which there was a group of menu buttons and one of them had a menu popped up. During the user evaluations, the demo application displayed a set of four choice popup menus which were used to set the label for an associated text field. It became clear that not all of the users could tell what" popped up" menu went with what menu button. Given our users had very little if any desktop user interface experience, the confusion was not surprising.

The design of the choice menu was revised such that the selected menu button and its menu were visually tied together with a colored outline (see Figure 10). In user testing, the new design did seem to alleviate most of the confusion.



Figure 10: Revised design of the choice menu.

A remaining problem with the widget was that users did not seem to easily pick up on the scrolling state of the menu. In the next user test, the clipping feedback from the scrolling list was added to the menu as an extra visual cue for users that the menu was scrollable(see Figure 11). This extra bit of visual feedback fixed the scrolling problem successfully.

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Figure 11: Final design of the choice menu.

The choice menu is another widget that demonstrates the strength of building redundancy into the interface. The choice menu can be closed in three different ways. The user can touch an item in the menu to select that item and close the menu. The user can touch the arrow on the menu button or simply touch outside the menu to dismiss the menu. The last two methods do not change the selection. The choice to have the widget behave this way was based on observation of the varying behaviors of the participants in the user studies. Afterall, no two users are exactly alike. When possible, the Touchable look and feel attempts to accommodate the varying behaviors of theusers.

Text

Text fields and text areas differ in their visual appearance from the typical box one sees on a desktop system. In designing the text field and text area widgets in the Touchable look and feel, it became painfully obvious that consumers did not automatically know to touch a text field or text area to enter text into it. After several iterations of the design, the final design of these widgets incorporates a lightly shaded background with a small vertical affordance on the left edge of a text field and area. This affordance leverages the manner in which color is used by employing the button color. Figure 12 provides an example of the text field and text area widgets in the context of an address book application.

Group:	Family		Private		
Last Name:	Shoemaker Thomp	First Name:	Jonathan		
Tille:	Photographer				
Company:	National Geographic				
Home	(010) 352-5540	/ Work	(310) 778-978		
⁷ Fage	(888) 654-0180	Muble	(010) 655-1129		
Notes:					
	Wedding anniversary, June 4				
	Elizabeth's birthday: July 26				
	Done				

Figure 12: Example of the text field and text area widgets in the context of an address book application.

Another observation made during the user studies was that consumers expect to be able to simply tap on an empty line (i.e., below the last line of text) in a text area and have the insertion point appear on that line so they can enter text. In addition, users expect the down arrow on the keyboard, physical and on-screen versions, to move the insertion point down to a empty line.

Though not supported in the desktop market, this behavior is the default behavior in the final design of the text areas in the Touchable look and feel.

The behavior of the insertion point in the text field and text area widgets was also the result of the data from the user studies. In the final design of the Touchable look and feel, when the user taps on a field, the word they tap on is selected. Upon second tap, the insertion point is set at the tap point. This model of selecting a word upon tap, lessens usability errors when the finger is used for input. When a pen or stylus is used for input, the model recommended in the Touchable look and feel is to place the insertion point at the tap point. The selection mode is a property that can be easily altered.

Conclusions

Designing for consumer products requires a different perspective than designing for desktop computers. Memory and input device limitations, as well as user expectations, have direct implications on the look and feel for consumer products.

The Touchable look and feel is a reference look and feel design. Device manufacturers are expected to modify the look and feel to make it suitable for their product. The Touchable look and feel provides the building blocks for creating a good user experience for touchscreen based consumer products. Although it contributes to good design, the Touchable look and feel does not guarantee good design in and of itself. The device manufacturer should consider the overall behavior of their product and how customers will use it in order to produce well-designed applications.

The Touchable look and feel is intended to be the first in a series of look and feels created for the consumer product market. The goal of producing such look and feels is for Sun Microsystems Inc. to continue creating products and technologies that make our customers successful by helping them get to market sooner. Indeed, one of the key selling points of our look and feel technology is the ability to easily alter and customize it, thereby being able to tailor it to specific needs. Our products and technologies, including the Touchable look and feel, reflect our commitment to understand and address the differing needs of the consumer product market.

Related Reading

- * Consumer Products User Experience Style Guide (forthcoming)
- Truffle Graphical Toolkit Customization Guide

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Electronically filed April 30, 2008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Bas Ording	Confirmation No.:	8460
Serial No.:	11/956,969	Art Unit:	2174
Filed:	December 14, 2007	Examiner:	Wiley, David Armand
For:	List Scrolling and Document Translation, Scaling, and Rotation on a Touch-Screen Display	Attorney Docket No.: P4304US1/6326	56-5054-US

INFORMATION DISCLOSURE STATEMENT IN SUPPORT OF PETITION TO MAKE SPECIAL

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure provisions of 37 C.F.R. §1.56, there is hereby provided certain information which the Examiner may consider material to the examination of the subject U.S. patent application. It is requested that the Examiner make this information of record if it is deemed material to the examination of the application.

- 1. Enclosures accompanying this Information Disclosure Statement are:
 - 1a. \square A list of all patents, publications, applications, or other information submitted for consideration by the office.
 - 1b. A legible copy of :

Each U.S. patent application publication and U.S. and foreign patent;

Each publication or that portion which caused it to be listed on the PTO-1449;

For each cited pending U.S. application, the application specification including the claims, and any drawing of the application, or portion of the application which caused it to be listed on the PTO-1449 including any claims directed to that portion;

- all other information or portion which caused it to be listed on the PTO-1449.
- 1c. An English language copy of search report(s) from a counterpart foreign application or PCT International Search Report.
- 1d. Explanations of relevancy (ATTACHMENT 1(d), hereto) or English language

		abstracts of the non-English language publications.
2.	\boxtimes	This Information Disclosure Statement is filed under 37 C.F.R. §1.97(b):
		Within three months of the filing date of a national application other than a continued prosecution application under §1.53(d);
		Within three months of the date of entry of the national stage as set forth in §1.491 in an international application;
		Before the mailing of the first Office action on the merits;
		Before the mailing of a first Office action after the filing of a request for continued examination under §1.114.
3.		This Information Disclosure Statement is filed under 37 C.F.R. §1.97(c) after the period specified in 37 C.F.R §1.97(b), but before the mailing date of any of a final action under 37 C.F.R. §1.113, a notice of allowance under 37 C.F.R. §1.311 or an action that otherwise closes prosecution in the application.
		(Check either Item 3a or 3b)
	3a.	The Certification Statement in Item 5 below is applicable. Accordingly, no fee is required.
	3b.	 The \$180.00 fee set forth in 37 C.F.R. §1.17(p) in accordance with 37 C.F.R. §1.97(c) is: enclosed to be charged to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (order no.).
		(Item 3b to be checked if any reference known for more than 3 months)
4.		This Information Disclosure Statement is filed under 37 C.F.R. §1.97(d) after the period specified in 37 C.F.R. §1.97(c), but on or before the date of payment of the issue fee.
		(Check either Item 4a or 4b)
	4a.	The Certification Statement in Item 5 below is applicable.
	4.b	The \$180.00 fee set forth in 37 C.F.R. §1.17(p) is:
		 enclosed. to be charged to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (order no.).
5.		Certification Statement (applicable if Item 3a or Item 4a is checked)
		(Check either Item 5a, 5b or 5c)
	5a.	In accordance with 37 C.F.R. §1.97(e)(1), it is certified that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.

	5b.	☐ In accordance with 37 C.F.R. §1.97(e)(2), it is certified that no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.
	5c.	Pursuant to 37 C.F.R. §1.704(d), each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart application, and the communication was not received by any individual designated in 37 C.F.R. §1.56(c) more than thirty days prior to the filing of this information disclosure statement.
6.		Copies of each cited U.S. patent and each U.S. patent application publication are not enclosed pursuant to the USPTO OG Notice dated 05 August 2003 waiving the requirement under 37 C.F.R. 1.98(a)(2)(i) for U.S. patent applications filed after June 30, 2003.
7.		This application is a continuation application under 37 C.F.R. §1.53(b) or (d).
		(Check appropriate Items 7a, 7b and/or 7c)
	7a.	A Petition to Withdraw from issue under 37 C.F.R. §1.313(b)(5) is concurrently filed herewith.
	7b.	 Copies of publications listed on Form PTO-1449 from prior application Serial No. , filed on , of which this application claims priority under 35 U.S.C. §120, are not being submitted pursuant to 37 C.F.R. §1.98(d).
	7c.	Copies of the publications listed on Form PTO-1449 were not previously cited in prior application Serial No. , filed on , and are provided herewith.
8.		This is a Supplemental Information Disclosure Statement. (Check Item 8a)
	8a.	☐ This Supplemental Information Disclosure Statement under 37 C.F.R. §1.97(f) supplements the Information Disclosure Statement filed on . A bona fide attempt was made to comply with 37 C.F.R. §1.98, but inadvertent omissions were made. These omissions have been corrected herein. Accordingly, additional time is requested so that this Supplemental Information Disclosure Statement can be considered as if properly filed on .
9.		In accordance with 37 C.F.R. §1.98, a concise explanation of what is presently understood to be the relevance of each non-English language publication is:
		(Check Item 9a, 9b, or 9c)
	9a.	satisfied because all non-English language publications were cited on the enclosed English language copy of the PCT International Search Report or the search report from a counterpart foreign application indicating the degree of relevance found by the foreign office.

- 9b. set forth in the application.
- 9c. enclosed as an attachment hereto.
- X 10. The Commissioner is authorized to charge any additional fee required or credit any overpayment for this Information Disclosure Statement and/or Petition to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (order no. 63266-5054-US).
- X 11. No admission is made that the information cited in this Statement is, or is considered to be, material to patentability nor a representation that a search has been made (other than a search report of a foreign counterpart application or PCT International Search Report if submitted herewith). 37 C.F.R. §§1.97(g) and (h).

Respectfully submitted,

Date: April 30, 2008

Robert Bayen Robert B. Beyers, Ph.D. 46,552

(Reg. No.)

MORGAN, LEWIS & BOCKIUS LLP 2 Palo Alto Square 3000 El Camino Real, Suite 700 Palo Alto, CA 94306 (650) 843-4000

	ed States Paten	T AND TRADEMARK OFFICE	UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 22: www.uspto.gov	TMENT OF COMMERCE Trademark Office "OR PATENTS 313-1450	
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
11/956,969	12/14/2007	Bas Ording	P4304US1/63266-5054US	8460	
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PALO ALTO,	CA 94306		ART UNIT	PAPER NUMBER	
			2174		
			MAIL DATE	DELIVERY MODE	
			06/09/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
Examiner-Initiated Interview Summary	11/956,969	ORDING, BAS		
	Examiner	Art Unit		
	BORIS PESIN	2174		
All Participants:	Status of Application:			
(1) <u>BORIS PESIN</u> .	(3) <u>Cyndi Wheeler</u> .			
(2) <u>Robert Beyers</u> .	(4)			
Date of Interview: <u>2 June 2008</u>	Time: <u>1:30 PM</u>			
Type of Interview: □ Telephonic □ Video Conference ⊠ Personal (Copy given to: □ Applicant ☑ Applicant's representative) Exhibit Shown or Demonstrated: ☑ Yes □ No If Yes, provide a brief description: Apple Iphone.				
Part I.				
Rejection(s) discussed: Proposed Examiner's rejection				
Claims discussed: 1				
Prior art documents discussed: Zimmerman et al. (US 6690387), Microsoft word Screenshots, and Colling et al (US 2008/0104544)				
Part II.				
SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED: See Continuation Sheet				
Part III.				
 It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability. It is not necessary for applicant to provide a separate record of the substance of the interview since the interview. 				
did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.				

/Boris Pesin/ Primary Examiner, Art Unit 2174

(Applicant/Applicant's Representative Signature – if appropriate)

Continuation of Substance of Interview including description of the general nature of what was discussed: The Examiner and the Applicant's representatives discussed the prior art applied to the independent claims. The Examiner agreed that Collins did not read on the claims as written. The Applicant agreed to amend the last limitation of the independent claims to read "in response to detecting that the object is no longer on or near the touch screen display, translating the document in a second direction until the area beyond the edge of the document is no longer displayed." The Examiner informed the Applicant that a further search would be conducted and that if more prior art is found, that the Examiner would contact the Attorney.