Exhibit 11

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Counterclaim-Defendant Apple Inc.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

APPLE INC., a California corporation,
 	
       Plaintiffs,
 	
       vs.
 	
SAMSUNG ELECTRONICS CO., LTD., a Korean business entity, SAMSUNG ELECTRONICS AMERICA, INC., a New York corporation, and SAMSUNG TELECOMMUNICATIONS AMERICA, LLC, a Delaware limited liability company,
 	
       Defendants.
	Civil Action No. 11-CV-01846-LHK
	
	PLAINTIFF AND COUNTERCLAIM-DEFENDANT APPLE INC.'S INVALIDITY CONTENTIONS

SAMSUNG ELECTRONICS CO., LTD., a Korean business entity, SAMSUNG ELECTRONICS AMERICA, INC., a New York corporation, and SAMSUNG TELECOMMUNICATIONS AMERICA, LLC, a Delaware limited liability company, a California corporation,

Counterclaim-Plaintiff,

v.

APPLE INC., a California corporation,

Counterclaim-Defendants.

PLAINTIFF AND COUNTERCLAIM-DEFENDANT
APPLE INC.'S INVALIDITY CONTENTIONS

I.   INTRODUCTION

Pursuant to Rule 3-3 of the Local Rules of Practice for Patent Cases Before the United

States District Court for the Northern District of California ("Patent L.R.") and the Court's

Minute Order and Case Management Order [Dkt. No. 187], Plaintiff and Counterclaim-

Defendant Apple Inc. ("Apple") hereby serves Invalidity Contentions with respect to the asserted

claims of U.S. Patent Nos. 6,928,604 (the "'604 patent"), 7,050,410 (the "'410 patent"),

7,069,055 (the "'055 patent"), 7,079,871 (the "'871 patent"), 7,200,792 (the "'792 patent"),

7,362,867 (the "'867 patent"), 7,386,001 (the "'001 patent"), 7,447,516 (the "'516 patent"),

7,456,893 (the "'893 patent"), 7,577,460 (the "'460 patent"), 7,675,941 (the "'941 patent"), and

7,698,711 (the "'711 patent") (collectively, the "Patents-In-Suit") identified by Samsung

Electronics Co., Ltd., Samsung Electronics America, Inc. and Samsung Telecommunications

America, LLC (collectively, "Samsung") in Samsung's Disclosure of Asserted Claims and

Infringement Contentions served on September 7, 2011.

Samsung has asserted the following claims against Apple:

- '604 patent: claims 1-4, 6, 10-12, 17-22, and 24

- '410 patent: claims 1-57

- '055 patent: claims 1-4, and 6-8

- '871 patent: claims 5, 9-11, and 20

- '792 patent: claims 11-16

- '867 patent: claims 25-27, and 30

- '001 patent: claims 1-21

- '516 patent: claims 1-6, 9-10, 14-20, 23-24, and 28

- '893 patent: claims 1-4, 6-8, and 10-16

- '460 patent: claim 1

- '941 patent: claims 1-2, 4, 6-11, 13, and 15-18

- '711 patent: claims 1-2, 7-10, and 15-18

With respect to each asserted claim and based on its investigation to date, Apple hereby:
(a) identifies each item of prior art that anticipates each asserted claim or renders it obvious; (b)
specifies whether each such item of prior art anticipates each asserted claim or renders it
obvious, and, if it renders it obvious, explains why the prior art renders the asserted claim
obvious and identifies any combinations of prior art showing obviousness; (c) submits a chart
identifying where specifically in each item of prior art each limitation of each asserted claim is
found, including, for each limitation that is governed by 35 U.S.C. § 112(6), the identity of the
structure(s), act(s), or material(s) in each item of prior art that performs the claimed function; (d)
identifies the grounds of invalidity based on 35 U.S.C. § 101, indefiniteness under 35 U.S.C. §

112(2) or enablement or written description under 35 U.S.C. § 112(1) of any of the asserted claims.

In addition, pursuant to Patent L.R. 3-4, and based on its investigation to date, Apple is producing concurrently with these Invalidity Contentions documents within its possession, custody, and control required to accompany the Invalidity Contentions. In addition, upon entry of an appropriate protective order that addresses procedures for access to the parties' source code, and upon receiving the consent of any necessary non-parties, Apple will make available the source code in its possession sufficient to show the operation of the accused functionality.

II.   RESERVATIONS

Consistent with Patent L.R. 3-6, Apple reserves the right to amend these Invalidity Contentions.

The information and documents that Apple produces are provisional and subject to further revision as follows. Apple expressly reserves the right to amend these disclosures and the accompanying document production should Samsung provide any information that it failed to provide in its Patent L.R. 3-1 and 3-2 disclosures, or should Samsung amend its Patent L.R. 3-1 or 3-2 disclosures in any way. Further, because discovery (including discovery from third parties) is not complete, Apple reserves the right to revise, amend, and/or supplement the information provided herein, including identifying and relying on additional references, should Apple's further search and analysis yield additional information or references, consistent with the Patent Local Rules and the Federal Rules of Civil Procedure. Moreover, Apple reserves the right to revise its ultimate contentions concerning the invalidity of the asserted claims, which may change depending upon the Court's construction of the asserted claims, any findings as to

the priority or invention date of the asserted claims, and/or positions that Samsung or its expert witness(es) may take concerning claim construction, infringement, and/or invalidity issues.

Prior art not included in this disclosure, whether known or unknown to Apple, may become relevant. In particular, Apple is currently unaware of the extent, if any, to which Samsung will contend that limitations of the asserted claims are not disclosed in the prior art identified by Apple, or will contend that any of the identified references do not qualify as prior art under Section 102. The identification of any patents as prior art shall be deemed to include identification of any foreign counterpart patents. To the extent that such issues arise, Apple reserves the right to identify additional teachings in the same references or in other references that anticipate or would have made the addition of the allegedly missing limitation to the device or method obvious. In providing these contentions, Apple has relied on Samsung's compliance as of October 7, 2011 with Patent Local Rules 3-1 and 3-2.

Apple's claim charts in Exhibits A-1 through L-10 cite to particular teachings and disclosures of the prior art as applied to features of the asserted claims. However, persons having ordinary skill in the art may view an item of prior art generally in the context of other publications, literature, products, and understanding. Accordingly, the cited portions are only examples, and Apple reserves the right to rely on uncited portions of the prior art references and on other publications and expert testimony as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that a claim limitation is known or disclosed. Citations to figures are inclusive of all discussion of those figures. Apple further reserves the right to rely on uncited portions of the prior art references, other publications, documents explicitly or implicitly incorporated by references, and testimony to establish bases for combinations of certain cited references that render the asserted claims obvious. Further, for

any combination, Apple reserves the right to rely additionally on information generally known to those skilled in the art and/or common sense.

The references discussed in the claim charts in Exhibits A-1 through L-10, or elsewhere identified, may disclose the elements of the asserted claims explicitly and/or inherently, and/or they may be relied upon to show the state of the art in the relevant timeframe. The suggested obviousness combinations are provided in the alternative to Apple's anticipation contentions and are not to be construed to suggest that any reference included in the combinations is not itself anticipatory.

Apple further reserves the right to assert that the asserted claims are invalid under 35 U.S.C. § 102(f) in the event that Apple obtains evidence that the named inventors of the Patents-In-Suit did not invent (either alone or in conjunction with others) the subject matter recited in the asserted claims. Should Apple obtain such evidence, it will provide the name of the person(s) from whom and the circumstances under which the invention or any part of it was derived. Apple further intends to rely on inventor admissions concerning the scope of the asserted claims or of the prior art relevant to the asserted claims found in, *inter alia*: the patent prosecution history and/or reexamination history for the Patents-In-Suit and related patents and/or patent applications; any deposition testimony of the named inventors of the Patents-In-Suit; and the papers filed and any evidence submitted by Samsung in conjunction with this litigation or any related actions. To the extent any information is identified under Section 102(f), Apple reserves the right to contend that the patent is invalid for failure to name the correct inventorship, and/or to contend that Samsung lacks standing to bring this litigation with respect to such patents.

1   Apple further reserves the right to assert that the patents are unenforceable due to

2   inequitable conduct at least on the grounds that any of the references identified herein were

3   material and withheld with an intent to deceive the patent office.

4   Furthermore, nothing stated herein shall be treated as an admission or suggestion that

5   Apple agrees with Samsung regarding either the scope of any asserted claim or the claim

6   constructions Samsung advances in its Infringement Contentions or anywhere else. To the extent

7   that Apple's Invalidity Contentions reflect constructions of claim limitations consistent with or

8   suggested by Samsung's Infringement Contentions, no inference is intended nor should any be

9   drawn that Apple agrees with Samsung's claim constructions. Nor shall anything in these

10   Invalidity Contentions be treated as an admission that Apple's accused technology meets any

11   limitation of any asserted claim. Apple denies that it infringes any claim of the Patents-In-Suit.

12   To the extent that any prior art reference identified by Apple contains a claim element that is the

13   same as or similar to an element in an accused product, based on a claim construction inferred

14   from Samsung's Infringement Contentions, inclusion of that reference in Apple's Invalidity

15   Contentions shall not be deemed a waiver by Apple of any claim construction or non-

16   infringement position. Apple expressly reserves the right to contest any claim construction

17   asserted by Samsung and expressly reserves all non-infringement arguments.

18   Depending on the Court's construction of the asserted claims of the Patents-In-Suit,

19   and/or positions that Samsung or its expert witness(es) may take concerning claim interpretation,

20   infringement, and/or invalidity issues, different ones of the charted prior art references in

21   Exhibits A-1 through L-10, or otherwise identified herein, may be of greater or lesser relevance

22   and different combinations of these references may be implicated. Given this uncertainty, the

23   charts may reflect alternative applications of the prior art against the asserted claims. Nothing

stated herein shall be construed as an admission or a waiver of any particular construction of any claim term. Apple also reserves all of its rights to challenge any of the claim terms herein under 35 U.S.C. § 112, including by arguing that they are indefinite, not supported by the written description, and/or not enabled. Accordingly, nothing stated herein shall be construed as a waiver of any argument available under 35 U.S.C. § 112. Apple also reserves its right to challenge the patentability of any of the asserted claims under 35 U.S.C. § 101.

III.   IDENTIFICATION OF PRIOR ART PURSUANT TO PATENT L.R. 3-3(a)

A. The '604 Patent

1. Prior Art Patent References

The following prior art patent references, including those patent references listed in Exs. A-1 through A-12, anticipate and/or render obvious the asserted claims of the '604 patent.

	Patent No. / Application No.	Country of Origin	Date Issued/Published
1.	5,014,314 (Mulford)	US	May 7, 1991
2.	5,103,445 (Östlund)	US	April 7, 1992
3.	5,109,390 (Gilhousen)	US	April 28, 1992
4.	5,109,403 (Sutphin)	US	April 28, 1992
5.	5,386,588 (Yasuda)	US	Jan. 31, 1995
6.	5,455,823 (Noreen)	US	Oct. 3, 1995
7.	5,666,348 (Thornberg)	US	Sept. 9, 1997
8.	5,742,588 (Thornberg)	US	April 21, 1998
9.	5,907,582 (Yi)	US	May 25, 1999
10.	5,831,978 (Willars)	US	Nov. 3, 1998
11.	5,455,823 (Noreen)	US	Oct. 3, 1995
12.	4,312,070 (Coombes)	US	Jan. 19, 1982
13.	5,212,684	US	May 18, 1993
14.	5,307,351	US	April 26, 1994
15.	5,212,684	US	May 18, 1993
16.	5,307,351	US	April 26, 1994
17.	5,430,774	US	July 4, 1995
18.	5,442,646	US	August 15, 1995
19.	5,446,747	US	August 29, 1995
20.	5,936,972	US	August 10, 1999
21.	5,943,371	US	August 24, 1999
22.	5,991,454	US	November 23, 1999
23.	6,088,387	US	July 11, 2000

	Patent No. / Application No.	Country of Origin	Date Issued/Published
24.	6,289,486	US	September 11, 2001
25.	6,370,669	US	April 9, 2002
26.	EP 0 528 370	EP	February 24, 1993
27.	EP 0 652 680	EP	May 10, 1995
28.	JP 6 350575	Japan	December 22, 1994
29.	JP 7 254862	Japan	October 3, 1995
30.	JP 8 237146	Japan	September 13, 1996
31.	JP 9 298526	Japan	November 18, 1997
32.	WO 97/40582	PCT	October 30, 1997

2. Prior Art Publications

The following prior art publications, including those publications listed in Exs. A-1 through A-12, anticipate and/or render obvious the asserted claims of the '604 patent.

	Title	Date of Publication	Author or Publisher
1.	"Network and Customer Installation Interfaces - Asymmetric Digital Subscriber Line (ADSL) Metallic Interface"	1995	American National Standard for Telecommunications
2.	"A CDMA Radio Link with 'Turbo-Decoding': Concept and Performance Evaluation"	1995	L. Bomer, F. Burke, J. Eichinger, R. Half, W. Liegl, M. Werner
3.	"Report Concerning Space Data System Standards: Telemetry Summary of Concept and Rationale"	December 1987	Consultative Committee for Space Data Systems
4.	"Development of Turbo Code for Transmitting Voice on FPLMTS"	1997	Young Kim, Pil Joong Lee, Chang Bum Lee, Hyeon Woo Lee
5.	"Advances on the application of turbo-codes to data services in third generation mobile networks"	1997	Peter Jung, Jorg Plechinger, Markus Doetsch, and Friedbert Manfred Berens
6.	TR 101 146 V3.0.0	December 1997	Universal Mobile Telecommunications System
7.	"Variable Latency Turbo Codes for Wireless Multimedia Applications"	1997	Matthew C. Valenti and Brian D. Woerner
8.	GSM 05.03 v. 5.3.1, ETS 300 909	August 1997	ETSI

L. The '711 Patent

1. Prior Art Patent References

The following prior art patent references, including those patent references listed in Exs.

L1-L5, anticipate and/or render obvious the asserted claims of the '711 patent.

	Number	Country of origin	Date Issued/Published
1	6407325	US	6/2002
2	6509716	US	1/2003
3	6526041	US	2/2003
4	6608637	US	8/2003
5	6889043	US	5/2005
6	6894213	US	5/2005
7	6928648	US	8/9/2005
8	6944287	US	9/2005
9	6947728	US	9/2005
10	6999802	US	2/2006
11	7009637	US	3/2006
12	7065324	US	6/2006
13	7119268	US	10/2006
14	7123945	US	10/2006
15	7166791	US	1/2007
16	7206571	US	4/2007
17	7222304	US	5/2007
18	7231175	US	6/2007
19	7251504	US	7/2007
20	7526585	US	4/2009
21	7594181	US	9/2009
22	2002/0067308	US	6/2002
23	2002/0070960	US	6/2002
24	2002/0156937	US	10/2002
25	2003/0083106	US	5/2003
26	2003/0119562	US	6/2003
27	2003/0218976	US	11/2003
28	2003/0219706	US	11/2003
29	2003/0236814	US	12/2003
30	2004/0021697	US	2/2004
31	2004/0077340	US	4/2004
32	2005/0054379	US	3/2005
33	2005/0083642	US	4/2005
34	2005/0097506	US	5/2005
35	2005/0164688	US	7/2005
36	2005/0172789	US	7/2005

	Number	Country of origin	Date Issued/Published
37	2005/0181826	US	8/2005
38	2006/0036569	US	2/2006
39	2006/0135198	US	6/2006
40	2006/0174307	US	8/2006
41	2006/0197753	US	9/2006
42	2006/0209036	US	9/2006
43	2006/0211454	US	9/2006
44	2006/0212853	US	9/2006
45	2006/0229106	US	10/2006
46	2006/0246955	US	11/2006
47	2007/0025311	US	2/2007
48	2007/0039005	US	2/2007
49	2007/0050778	US	3/2007
50	2007/0118870	US	5/2007
51	2007/0225022	US	9/2007
52	10-2003-0084799	KR	6/2005
53	10-2005-0051086	KR	6/2005
54	403866	TW	9/2000
55	200502940	TW	1/2005
56	M269546	TW	7/2005

2. Prior Art Publications

The following prior art publications, including those publications listed in Exs. L1-L5, anticipate and/or render obvious the asserted claims of the '711 patent.

	Title	Date of Publication	Author or Publisher
1	"AAS Feature: Getting more from your E61 Active Standby Screen"	Jun. 22, 2006	Litchfield
2	"Sony Ericsson K750i, User Manual Guide"	Feb. 2005	Sony Ericsson Mobile Comm. AB
3	"Synthesis of Time-Constrained Multitasking Embedded Software," ACM Transactions on Design Automation of Electronic Systems, , pp. 822-847, vol. 11, No. 4., ACM Press, New York, NY, USA	Oct. 2006	Nacul
4	"Multitasking on Reconfigurable Architectures: Microarchitecture Support and Dynamic Scheduling," ACM "Transactions on Embedded Computing Systems", pp. 385-406, vol. 3, No. 2, ACM Press, New York, NY, USA	May 2004	Noguera

	Title	Date of Publication	Author or Publisher
5	"A Methodology and Algorithms for the Design of Hard Real-Time Multi-Tasking ASICs," ACM Transactions on Design Automation of Electronic Systems (TODAES) archive, , pp. 430-459, vol. 4, Issue 4, ACM Press, New York, NY, USA	Oct. 1999	Potkonjak
6	"Impromptu: Managing Networked Audio Applications for Mobile Users," MobiSys 2004--Second International Conference on Mobile Systems, Applications and Services, pp. 59-69.	2004	Schmandt
7	"Wireless Handheld Portable Communicator `mobileCyber`," NEC Technical Journal, pp. 214-218, vol. 51, No. 8, NEC, Japan.	Aug. 1998	Nakamura
8	"Operation Introduction to Windows Media Player" published online at www.microsoft.com/taiwan/windowsxp/windowsmediaplayer/getstarted.	Jun. 30, 2003	Microsoft Company
9	"The J2ME Mobile Media API" published online at http://developers.sun.com/mobility/midp/articles/mmapioverview	6/2003	Mahmoud
10	"Nokia 3300 Extended User's Guide"	2003	Nokia Corporation
11	"Sony W800i User Guide" (1st Ed.)	May 2005	Sony Ericsson Mobile Comm. AB
12	"Sony K700 User Guide" (1st Ed.)	March 2004	Sony Ericsson Mobile Comm. AB

3. Non-Patent/Publication References

Apple also contends that the Patents-In-Suit are invalid in view of public knowledge and uses and/or offers for sale or sales of products and services that are prior art under 35 U.S.C. § 102(a) or (b), and/or prior inventions made in the United States by other inventors who had not abandoned, suppressed, or concealed them under 35 U.S.C. § 102(g), and that anticipate or render obvious the asserted claims.

The following lists each item of prior art under 35 U.S.C. § 102(a), (b), and/or (g) by the name of the item and, to the extent now known, when the item became publicly known or was used, offered for sale, or sold, the identities of the persons or entities that made the item public, publicly used it, or made the offer for sale, and the identities of the person(s) or entities involved in, and the circumstances surrounding the making of, the invention. Apple contends that the following descriptions are stated on information and belief, and are supported by the information and documents that will be produced by Apple and/or third parties. As discovery is not complete, Apple continues to investigate these events.

a) Sony Ericsson W800i

The Sony Ericsson W800i mobile phone was offered for sale to the public or placed in public use by Sony Ericsson during the second quarter of 2005.

b) Sony Ericsson K700

The Sony Ericsson K700 mobile phone was offered for sale to the public or placed in public use by Sony Ericsson during the second quarter of 2004.

c) Nokia 3300

The Nokia 3300 mobile phone was offered for sale to the public or placed in public use by Nokia Corporation by August 10, 2003.

IV. CLAIM CHARTS PURSUANT TO PATENT L.R. 3-3 (C)

Individual claim charts that identify where each element of each asserted claim can be found in each item of prior art are attached hereto. A listing of these claim charts is provided below:

Exhibit A-1 through A-12: Claim charts for the '604 patent

Exhibit B-1 through B-8: Claim charts for the '410 patent

Exhibit C-1 through C-9: Claim charts for the '055 patent

Exhibit D-1 through D-11: Claim charts for the '871 patent

Exhibit E-1 through E-10: Claim charts for the '792 patent

Exhibit F-1 through F-4: Claim charts for the '867 patent

Exhibit G-1 through G-3: Claim charts for the '001 patent

Exhibit H-1 through H-8: Claim charts for the '516 patent

Exhibit I-1 through I-10: Claim charts for the '893 patent

Exhibit J-1 through J-7: Claim charts for the '460 patent

Exhibit K-1 through K-6: Claim charts for the '941 patent

Exhibit L-1 through L-5: Claim charts for the '711 patent

V.   **DISCLOSURE OF INVALIDITY DUE TO ANTICIPATION PURSUANT TO
        PATENT L.R. 3-3(B) AND (C)**

Subject to the reservation of rights above and based on Apple's present understanding of

the asserted claims of the Patents-In-Suit, and the apparent constructions Samsung is asserting

based on Samsung's Infringement Contentions, the prior art references charted in Exhibits A-1

through L-10 identify items of prior art that anticipate the asserted claims. The charts identify

where each element of each asserted claim can be found in each item of prior art. In particular:

A. The '604 Patent

1.   Bömer, L. et al., A CDMA Radio Link with 'Turbo-Decoding': Concept

        and Performance Evaluation, IEEE International Symposium on Personal,

        Indoor, and Mobile Radio Communications, PIMRC'95, September 27,

        1995, pp. 788-793 anticipates claims 1-4, 6, 10-12, 17, 18, 20-22, and 24

        of the '604 patent (Chart A-1).

2.   Technical Report TR 101 146 v. 3.0.0, December 1997 anticipates claims

        1-4, 6, 10-12, 17, 18, 20-22, and 24 of the '604 patent (Chart A-2).

J.   The '460 Patent

    1.   U.S. Patent No. 6,069,648 to Suso et al. anticipates claim 1 of the '460 patent (Chart J-1).

    2.   U.S. Patent No. 6,167,469 to Safai et al. anticipates claim 1 of the '460 patent (Chart J-2).

    3.   U.S. Patent No. 6,573,927 to Parulski et al. anticipates claim 1 of the '460 patent (Chart J-3).

    4.   U.S. Patent No. 6,642,959 to Arai anticipates claim 1 of the '460 patent (Chart J-4).

    5.   The Nokia 9110 Communicator mobile phone together with "Nokia 9110 Communicator User's Manual" and "Digital Camera Connectivity with Nokia 9110 Communicator" anticipates claim 1 of the '460 patent (Chart J-7).

K.   The '941 Patent

    1.   L2 Considerations for VoIP Support (Qualcomm R2-021645) anticipates claims 1-2, 4, 6-11, 13, and 15-18 of the '941 patent (Chart K-5).

L.   The '711 Patent

    1.   The Sony Ericsson W800i mobile phone together with associated Sony Ericsson W800i User Guide (1st Ed.) anticipates claims 1-2, 7-10, 15-18 of the '711 patent (Chart L-1).

    2.   The Sony Ericsson K700 mobile phone together with associated Sony Ericsson K700 User Guide (1st Ed.) anticipates claims 1-2, 7-10, 15-18 of the '711 patent (Chart L-3).

VI. DISCLOSURE OF INVALIDITY DUE TO OBVIOUSNESS PURSUANT TO PATENT L.R. 3-3(b) AND (c)

Subject to the reservation of rights above and based on Apple's present understanding of the asserted claims of the Patents-In-Suit, and the apparent constructions Samsung is asserting based on its Infringement Contentions, the prior art references identified above in Sections III and V, and charted in Exhibits A-1 through L-10, each anticipate the asserted claims.

To the extent a finder of fact finds that a limitation of a given claim was not disclosed by one of the references identified above pursuant to Patent L.R. 3-3(a), those claims are nevertheless unpatentable as obvious because the asserted claims contain nothing that goes beyond ordinary innovation. To the extent not anticipated, no asserted claim goes beyond combining known elements to achieve predictable results or does more than choose between clear alternatives known to those of skill in the art.

Moreover, to the extent the foregoing references are found not to anticipate the asserted claims, the foregoing references render the asserted claims obvious either alone or in combination with one or more of the other references identified above pursuant to Patent L.R. 3-3(a). As explained herein and/or in the accompanying charts, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims of the Patents-In-Suit to combine the various references cited herein so as to practice the asserted claims of the Patents-In-Suit. In addition to the specific combinations of prior art and the specific combinations of groups of prior art disclosed, Apple reserves the right to rely on any other combination of any prior art references disclosed herein. Apple further reserves the right to rely upon combinations disclosed within the prosecution history of the references cited herein. These obviousness combinations reflect Apple's present understanding of the potential scope of the

1   claims that Samsung appears to be advocating and should not be construed as Apple's

2   acquiescence to Samsung's interpretation of the patent claims.

3   A. The '604 Patent

4   In accordance with Patent L.R. 3-3(b), prior art references rendering the asserted claims

5   of the '604 patent obvious, alone or in combination with other references, are discussed below

6   and included in Exhibits A-1 through A-12. Exhibits A-1 through A-12 include exemplary claim

7   charts for the '604 patent showing specific combinations of references, including citations to

8   where in the references the teachings, suggestions, and motivations to combine the references are

9   disclosed. Further reasons to combine the references identified in Exhibits A-1 through A-12

10 include the nature of the problem being solved, the express, implied and inherent teachings of the

11 prior art, the knowledge of persons of ordinary skill in the art, that such combinations would

12 have yielded predictable results, and that such combinations would have represented known

13 alternatives to a person of ordinary skill in the art.

14   In particular, Apple contends that the asserted claims of the '604 patent would have been

15 obvious in view of the prior art references identified above. For example, Exhibits A-1 through

16 A-12 include exemplary claim charts that describe how the asserted claims of the '604 patent

17 would have been obvious in view of the following references alone or in combination. The

18 primary references cited in Apple's exemplary claim charts, Exhibits A-1 through A-12, are

19 Bömer, L. et al., A CDMA Radio Link with 'Turbo-Decoding': Concept and Performance

20 Evaluation, IEEE International Symposium on Personal, Indoor, and Mobile Radio

21 Communications, PIMRC'95, September 27, 1995, pp. 788-793 ("Bömer"); "Telemetry:

22 Summary of Concept and Rationale," Consultative Committee for Space Data Systems 100.0-G-

23 1, December 1987 ("CCSDS 100.0-G-1" or "Telemetry"); ANSI T1.413-1995 ("ANSI95");

- "Reception Buffer References" include U.S. Patent Application Publication 2002/0065093 (Yi); U.S. Patent No. 6,819,658 (Agarwal); and B-ISDN ATM Adaptation Layer Specification: Type 2 AAL, ITU-T Recommendation I.363.2.

L. The '711 Patent

In accordance with Patent L.R. 3-3(b), prior art references rendering the asserted claims of the '711 patent obvious, alone or in combination with other references, are discussed below and included in Exhibit L. Exhibit L includes exemplary claim charts for the '711 patent showing specific combinations of references, including citations to where in the references the teachings, suggestions, and motivations to combine the references are disclosed. Further reasons to combine the references identified in Exhibit L include the nature of the problem being solved, the express, implied and inherent teachings of the prior art, the knowledge of persons of ordinary skill in the art, that such combinations would have yielded predictable results, and that such combinations would have represented known alternatives to a person of ordinary skill in the art. In particular, Apple contends that the asserted claims of the '711 patent would have been obvious in view of the prior art references identified above. For example, Exhibits L-1 through L-5 include exemplary claim charts that describe how the asserted claims of the '711 patent would have been obvious in view of the following references alone or in combination:

- Sony Ericsson W800i mobile phone and associated User Guide (1st Ed.)

- Sony Ericsson K700 mobile phone and associated User Guide (1st Ed.)

- Nokia 3300 mobile phone and associated Extended User's Guide

- US Patent No. 7,123,945 to Kokubo

- US Patent Publication No. 2005/0083642 to Senpuku et al.

- US Patent Publication No. 2003/0236814 to Miyasaka et al.

- US Patent Publication No. 2004/0077340 to Forsyth

- US Patent No. 6,928,648 to Wong et al.

- US Patent No. 6,526,041 to Shaffer et al.

- Qusay H. Mahmoud, "The J2ME Mobile Media API" article

To the extent Samsung may argue that one or more claim elements are not present in any single reference, combinations are provided below which would render the claim invalid as obvious under 35 U.S.C. §103. Specifically:

1. The Sony Ericsson K700 mobile phone together with the corresponding User Guide may be combined with either the Mahmoud article, Wong patent, or Shaffer patent to render the asserted claims obvious under 35 U.S.C. §103(a) (Exhibit L-3).

2. The Sony Ericsson W800i mobile phone together with the corresponding User Guide may be combined with either the Mahmoud article, Wong patent, or Shaffer patent to render the asserted claims obvious under 35 U.S.C. §103(a) (Exhibit L-1).

3. The Nokia 3300 mobile phone together with the corresponding Extended User Guide may be combined with the Miyasaka publication and/or Kokubo patent and any of the Mahmoud article, Wong patent, or Shaffer patent to render the asserted claims obvious under 35 U.S.C. §103(a) (Exhibit L-4).

4. The Kokubo patent may be combined with the Senpuku application in view of any of the Mahmoud article, Wong patent, or Shaffer patent to render the asserted claims obvious under 35 U.S.C. §103(a) (Exhibit L-2).

5. The Miysaka application and/or Kokubo patent may be combined with the Forsyth patent in view of any of the Mahmoud article, Wong patent, or Shaffer patent to render the asserted claims obvious under 35 U.S.C. §103(a) (Exhibit L-5).

Taken alone or together in the combinations set forth above, the identified prior art references include all limitations of the '711 patent asserted claims and render each of the asserted claims obvious.

Motivations to Combine

Apple believes that no showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts. There was a reason to make each combination; each combination of art would have produced no unexpected results; and each combination at most would simply represent a known alternative to one of ordinary sill in the art. *See KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 414-18 (2007) (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation-to-combine test, instead espousing an "expansive and flexible" approach). "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 416. Similarly, "[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one," *id.* at 417, and thus "if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill." *Id.* Indeed, the Supreme Court has held that a person of ordinary skill is "a person of creativity, not an automaton" and "in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 420-21.

Nevertheless, in accordance with the Patent Local Rules, and in addition to the information contained elsewhere in these contentions, Apple hereby identifies below additional motivations and reasons to combine the cited art.

In order to determine whether there is a reason to combine the known elements in the manner claimed by a patent, a court can "look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art." *Id.* at 418. For example, obviousness can be demonstrated by showing "there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims." *Id.* at 420. "[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *Id.* Common sense also teaches that "familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.*

Applying these principles, it would have been obvious to a person of ordinary skill in the art at the time the application that issued as each of the Patents-In-Suit was filed to combine, modify, or use the teachings of the prior art to make the purported inventions of those patents, including by making each of the combinations identified above. The motivation to combine the teachings of the prior art references disclosed herein can be found in each of (1) the references themselves, (2) the nature of the problem being solved, (3) the express, implied and inherent teachings of the prior art, (4) the knowledge of persons of ordinary skill in the art, (5) the fact that the prior art is generally directed towards the subject matter of each respective asserted patent, and (6) the predictable results obtained in combining the elements of the prior art.

A. The '604 Patent

Any reference or combination of references that anticipates or makes obvious an asserted independent claim also makes obvious any asserted claim dependent on that independent claim

that include and indicate sequence numbers; data length such as length indicators; indicators of

first, intermediate, and last segments; indicators of whether data is segmented or not; and

indicators of whether data completely fills a frame without padding or segmentation. It would

have been a matter of obvious design choice as to which fields to use to communicate this

information in a header. One of ordinary skill in the art would have known these different types

of information. Selecting from among these pieces of header information would have been a

matter of obvious design choices using known pieces of information in known ways to

communicate information in a known and predictable manner.

L. The '711 Patent

Any reference or combination of references that anticipates or makes obvious an asserted

independent claim also makes obvious any asserted claim dependent on that independent claim

because every element of each dependent claim was known by a person of ordinary skill at the

time of the alleged invention, and it would have been obvious to combine those known elements

with the independent claims at least as a matter of common sense and routine innovation.

Numerous prior art references, including those identified above pursuant to Patent L.R. 3-

3(a) and in the Exhibits, reflect common knowledge and the state of the prior art before the

priority date of the '711 patent. Because it would be unduly burdensome to create detailed claim

charts for the thousands of invalidating combinations, Apple has provided illustrative examples

of such invalidating combinations below and in Exhibits L-1 through L-5. For at least the

reasons described above and below in the examples provided, as well as in the attached claim

charts, it would have been obvious to one of ordinary skill in the art to combine any of a number

of prior art references, including any combination of those identified in Exhibits L-1 through L-

5, to meet the limitations of the asserted claims. As such, Apple's identification of exemplary

combinations is without limitation to Apple's identifying other invalidating combinations as appropriate.

By 2005, devices with digital music file playback capability and multitasking methods for using the same were available and widely known in the art. For example, US Publication No. 2005/0181826 to Yueh describes personal digital assistant devices (PDAs) that incorporate digital music play functions, including MP3 files. US Publication No. 2005/0164688 to Satake teaches mobile phones that execute multiple applications in parallel. US Publication No. 2005/0054379 to Cao et al. describes a cordless telephone with MP3 player capability. Furthermore, by 2005, mobile phones were known to feature idle or "standby" modes when no applications were in use by the operator. *See, e.g.,* US Publication No. 2004/0077340 to Forsyth describing "idle" or standby screens to convey updated information customizable by the user. Finally, programming modules known as "applets" were well known in the context of programming for mobile devices written in the Java language. *See, e.g.*, Wong, U.S. Patent No. 6,928,648, review of applets and description of the prior art at Col. 1:24-67.

Samsung's '711 patent claims a mobile device with background MP3 playback capability, including playback while in standby mode or during use of another application. Furthermore, the '711 patent claims are directed to devices and methods comprising "generating a music background play object, wherein the music background play object includes an application module including at least one applet." During prosecution of the '711 patent, the examiner found all elements of the '711 asserted claims were present in the prior art except this "applet" limitation. Apple contends that it would have been obvious to perform the claimed methods or generate the claimed devices in view of the prior art cited above.

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These combinations reflect Apple's present understanding of the potential scope of the claims that Samsung appears to be advocating, and should not be seen as Apple's acquiescence to Samsung's interpretation of the asserted claims. Moreover, these examples are illustrative of the multitude of potential combinations of the prior art, and are not exhaustive. Apple reserves the right to rely on other combinations of the prior art, including other combinations of the prior art references identified above with each other and/or with the prior art references disclosed in the prosecution history of the '711 patent.

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Any of the mobile phone products listed above, including but not limited to the Nokia 3300, Sony Ericsson W800i, or Sony K700 mobile devices and corresponding user guides and manuals, provide most or all claim elements of the asserted claims. To the extent Samsung might argue that any of these references lacks an explicit teaching of the "generating a music background play object, wherein the music background play object includes an application module including at least one applet" limitation, this limitation would have been inherent. Furthermore, any of these devices, when combined with the teachings in any of the above-identified secondary references available before 2005, would have rendered each claim of the '711 patent obvious to the ordinary artisan. The secondary references include, but are not limited to, the Mahmoud article, the Shaffer patent, or the Wong patent, which describe the use of "applets" for media applications including MP3 play.

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Furthermore, during prosecution of the '711 patent, the examiner found the Kokubo patent in combination with the Senpuku published application rendered all relevant claims obvious under 35 U.S.C. §103(a) prior to Samsung's amendment requiring the "applet" limitation discussed above. However, references not before the examiner during prosecution,

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including the Wong, Shaffer, and Mahmoud publications, would have shown that the "applet" limitation was also well known in the art and would have been obvious to the ordinary artisan.

Also during prosecution, Samsung admitted that many of the claim elements were present in the prior art. For example, Samsung admitted the Miyasaka patent publication teaches many elements of asserted independent claims 1, 9, and 17, including a multi-tasking method in a pocket-sized mobile communication device, the method comprising selecting and playing a music file in the pocket-sized mobile communication device, displaying an indication that the music file is being played, selecting and performing at least one function of the pocket-sized mobile communication device while the playing of the music continues, and continuing to display the indication that the music file is being played while performing the selected function. Further, Samsung admitted that Miyasaka taught selecting a message function as required by asserted claims 7 and 15, a controller for selecting and playing a music file in the pocket-sized mobile communication device and for selecting and performing at least one function of the pocket-sized mobile communication device while the playing of the music file continues as required by asserted independent claim 9. As to independent claim 17, Samsung admitted that Miyasaka teaches a multi-tasking apparatus in a pocket-sized mobile communication device comprising a controller for selecting and playing a music file in the pocket-sized mobile communication device, and a display unit for displaying an indication that the music file is being played. *See* Prosecution History File for the '711 patent, Accelerated Examination Support Document of July 16, 2007 at pp. 4-5. For at least these reasons, the Miyasaka publication in the combinations recited above, including the secondary "applet" references, would have rendered the asserted claims invalid as obvious. To the extent Samsung might argue that Miyasaka did

not teach a standby mode in a mobile communication device, this was also well-known in the art as shown by references such as Forsyth.

Further, Samsung admitted during prosecution that at least asserted dependent claims 7, 8, 15, and 16 "have no features that would define over the references deemed most closely related if claims 1, 9, and 17 were found unpatentable." *See* Prosecution History File for the '711 patent, Accelerated Examination Support Document of July 16, 2007 at p.9.

It would have been obvious to a person of ordinary skill in the art by August 2005, the date the Korean priority application 10-2005-0079921 was filed, to combine, modify, or use the teachings of the prior art to make the purported inventions of the '711 patent asserted, including by making each of the combinations identified above. The motivation to combine the teachings of these prior art references can be found in each of (1) the references themselves, (2) the nature of the problem being solved, (3) the express, implied and inherent teachings of the prior art, (4) the knowledge of persons of ordinary skill in the art, and (5) the predictable results obtained in combining the elements of the prior art.

The limitation requiring an "applet" is present in all asserted claims of the '711 patent and would have been obvious to a person of ordinary skill in 2005 for any of the reasons listed below as motivations to combine the teachings in the art. For example, (1) each of the mobile devices cited as primary prior art references (Sony Ericsson W800i, Sony Ericsson K700, and Nokia 3300) supports running Java applications, which are commonly associated with "applets" for performing specific tasks, sometimes as part of larger applications. (2) The nature of the problem being solved, as articulated in the '711 patent itself, was "a need for an improved system and method to allow a user to simultaneously work on multiple menus of the portable terminal while listening to music" without the additional cost and complexity of a dedicated

control processor. '711 patent at Col. 1:49-51. The related prior art similarly identifies the

problem to be solved.[2] The problem itself would have motivated the ordinary artisan in 2005 to

look at Java-based applications which would obviate the need for additional hardware or

software complexity. (3) The express teachings of the secondary prior art references, described

below, would have further motivated the ordinary artisan to use a Java-based approach to a

music player in a mobile device. (4) Using Java applets to run MP3 players on mobile devices

was a well-established method in the art prior to 2005 and would have been obvious to combine

with the Java-compatible devices identified above. Finally, (5) the results obtained by using the

Java applet approach to generating a background music object on a mobile device would have

been entirely predictable. Neither the specification of the '711 patent nor the associated file

history indicates any unexpected results from the use of an applet to control the music player

function.

Taken alone or together in the combinations set forth above, the identified prior art

references include all limitations of the '711 patent asserted claims and render each of the

asserted claims obvious. For example, the Mahmoud article would have motivated the ordinary

artisan to employ applets for running MP3 music files on Java-enabled wireless mobile devices.

See, e.g., Mahmoud at Abstract and pp. 1, 5, and 8-10. Mobile phones leading up to 2005

commonly provided support for the Java 2 Micro Edition (J2ME) and the Mobile Media API

(MMAPI). J2ME was a Java Virtual Machine (JVM) specification specifically designed for

resource-constrained mobile devices. In 2005, a person of ordinary skill in the art would have

appreciated the benefits of supporting the J2ME, including an Object Oriented (OO)

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[2] For example, the Kokubo patent (referenced above) notes that "in the next generation of portable
telephones which will be more multi-functional than those presently available, it may be anticipated that
there will arise a need for carrying out a plurality of processes at the same time (parallel processing), such
as browsing a web site and listening to music at the same time, while writing an e-mail every now and
then." US Patent No. 7,123,945 to Kokubo at Col. 2:6-12.

programming model and a device-independent Application Programming Interface (API) that

facilitated rapid application design and deployment.

Likewise, the Wong patent would have motivated the ordinary artisan to combine Java-compatible mobile devices with MP3 players including an applet because it discloses methods of running small media applications, including applets, on top of the Java-enabled devices' native operating system. *See*, e.g., Wong patent at Col. 1:24-34 and Col. 9:16-20.

Further, the Shaffer patent would have motivated the ordinary artisan in 2005 to use an applet to generate a music background play object in any of the cited primary devices because Shaffer teaches a system for providing music on a network by providing an applet having a music file and a media player from the server to the client. *See*, e.g., Shaffer at Col. 1:61-2:8. The ordinary artisan in 2005 with either the teachings of Shaffer, Wong, or Mahmoud would have been motivated to combine MP3-playing, Java-enabled cell phones with programming including "applets" for music-playing functions.

The Forsyth published patent application would have motivated the ordinary artisan in 2005 to incorporate a standby screen into the operation of a mobile phone device. Forsyth includes multiple potential applications which can be executed from the standby screen on a mobile device, including MP3 music file functionality. *See*, *e.g*., Forsyth at ¶¶ 002 and 123.

The Senpuku reference was cited by the examiner during prosecution as teaching a mobile communication device capable of multitasking and switching between applications. Further, when the sub-display in Senpuku is closed, the active screen on the display continues to execute the application other applications are continued in the background. *See, e.g*., Senpuku publication at paragraphs ¶¶ 105, 106, 110.

In light of the above, one of ordinary skill in the art would have found it obvious to combine the prior art teaching mobile devices with multitasking music functions, including displaying icons indicating background music play, with routine programming of well-known Java 2 Micro Edition (J2ME) applications, including MP3 player functions. According to the Supreme Court's standard articulated in *KSR*, "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR*, 550 U.S. at 416.   As described above, the asserted claims of the '711 patent represent the application of commonly known Java-based programming methods to existing mobile devices, with entirely predictable results.

VII.   CONTENTIONS UNDER 35 U.S.C. § 112 PURSUANT TO PATENT L.R. 3-3(d)

In accordance with Patent L.R. 3-3(d), Apple includes below the grounds on which Apple contends the asserted claims of the Patents-In-Suit are invalid for failure to meet the requirements of the first two paragraphs of 35 U.S.C. § 112.

As noted above, Samsung has not yet provided a claim construction for many of the terms and phrases that Apple anticipates will be in dispute. Apple, therefore, cannot provide a complete list of its § 112 defenses because Apple does not know whether Samsung will proffer a construction for certain terms and phrases that is broader than, or inconsistent with, the construction that would be supportable by the disclosure set forth in the specification.

To the extent the following contentions reflect constructions of claim limitations consistent with or implicit in Samsung's Infringement Contentions, no inference is intended nor should any be drawn that Apple agrees with Samsung's claim constructions, and Apple expressly reserves the right to contest such claim constructions. Apple offers these contentions in response

1 to Samsung's Infringement Contentions and without prejudice to any position it may ultimately

2 take as to any claim construction issues.

3 Accordingly, Apple reserves the right to supplement, amend, and/or modify these § 112

4 invalidity contentions as discovery progresses.

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6 A. The '604 Patent

7 Claims 1-4, 6, 10-12, 17-22 and 24 of the '604 patent are invalid under 35 U.S.C. §112,

8 second paragraph, because they fail to particularly point out and distinctly claim the subject

9 matter which the applicant regards as his invention. In particular, the term "super frame" is

10 indefinite because this term is used inconsistently throughout the claims of the '604 patent. In

11 claim 1, for example, "super frame" is used to refer to a block of *unencoded* data that is encoded

12 by the turbo encoder (*see*, '604 patent, claim 1: "… a turbo encoder for turbo encoding the super

13 frame …"). However, in claim 17, the term "super frame" is apparently used to refer to a block

14 of *encoded* data that is decoded by a turbo decoder (*see*, '604 patent, claim 17: "… a decoder for

15 turbo decoding data being received as a super frame …"). Because of this inconsistent usage, the

16 term "super frame" is insolubly ambiguous. Therefore, claims 1-4, 6, 10-12, 17-22 and 24, are

17 indefinite under 35 U.S.C. §112, second paragraph.

18 Claims 1-4, 6, 10-12, 17-22 and 24 of the '604 patent are invalid under 35 U.S.C. §112,

19 second paragraph, because they fail to particularly point out and distinctly claim the subject

20 matter which the applicant regards as his invention. In particular, the term "input data frames" is

21 indefinite because this term is used inconsistently throughout the claims of the '604 patent. In

22 claim 1, for example, "input data frames" is used to refer to blocks of *unencoded* data that are

23 concatenated to form a super frame, which is then encoded by a turbo encoder (*see*, *e.g.*, '604

24 patent, claim 1: "… determining the number of input data frames to concatenate to compose a

1 specification does not support "if the one-bit field indicates that the PDU contains the entire

2 SDU in its data field."

3   L. The '711 Patent

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5   Apple contends that all asserted claims are invalid as failing to provide adequate written

6 description of the claimed invention under 35 U.S.C. §112, paragraph 1. All claims of the '711

7 patent recite "generating a music background play object, wherein the music background play

8 object includes an application module including at least one applet." However, the '711

9 specification contains only a single reference to an "applet" at Col. 3 ln. 12: "[a]pplication

10 modules of the portable terminal include at least one applet and each of the application modules,

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12 that is each menu of the portable terminal, independently performs multi-tasking." This single

13 recitation of "applet" would not convey to the person of ordinary skill in the art that the inventor

14 was in possession of the full scope of the claimed invention, including the limitation above.

15 **VIII. CONTENTIONS UNDER 35 U.S.C. § 101 PURSUANT TO PATENT L.R. 3-3(d)**

16   In accordance with Patent L.R. 3-3(d), Apple includes below the grounds on which Apple

17 contends the asserted claims of the Patents-In-Suit are invalid for failure to meet the

18 requirements of 35 U.S.C. § 101.

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20   As noted above, Samsung has not yet provided a claim construction for many of the

21 terms and phrases that Apple anticipates will be in dispute. Apple, therefore, cannot provide a

22 complete list of its § 101 defenses because Apple does not know whether Samsung will proffer a

23 construction for certain terms and phrases that is broader than, or inconsistent with, the

24 construction that would be supportable by the disclosure set forth in the specification.

25 Accordingly, Apple reserves the right to supplement, amend, and/or modify these § 101

26 invalidity contentions as discovery progresses.

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1   To the extent the following contentions reflect constructions of claim limitations

2 consistent with or implicit in Samsung's Infringement Contentions, no inference is intended nor

3 should any be drawn that Apple agrees with Samsung's claim constructions, and Apple expressly

4 reserves the right to contest such claim constructions. Apple offers these contentions in response

5 to Samsung's Infringement Contentions and without prejudice to any position it may ultimately

6 take as to any claim construction issues.

7   A. The '055 Patent

8   Apple contends that claims 1-4 and 6-8 are invalid because they do not constitute

9 patentable subject matter under 35 U.S.C. § 101. Claim 1 includes the claim elements "means

10 for receiving a reference time from a signal received from a remote system; … means for

11 selecting at least one of said plurality of cities and automatically calculating a local time of said

12 selected city, said local time being based on a difference between the GMT of said selected city

13 and the GMT of a present location of said apparatus, said reference time and said elapsed

14 time…" Independent claims 1 and 4, as well as the claims that depend from these claims are

15 invalid under 35 U.S.C. § 101, as applied, for example, in *Bilski v. Kappos*, 130 S. Ct. 3218 (U.S.

16 2010) and *Cybersource Corp. v. Retail Decisions, Inc.*, Fed. Cir., No. 2009-1358, ___ F.3d ___,

17 2011 U.S. App. LEXIS 16871 (Fed. Cir. Aug. 16, 2011). In *Cybersource*, the Federal Circuit

18 determined that claims related to a method of fraud detection failed the machine-or-

19 transformation test and were not rendered patentable by data-gathering steps. Further, the

20 allegedly patentable step carried out by the computer was a mental process that could have

21 simply been carried out by the human mind or a human using a pen and paper. It is not enough

22 under the machine-or-transformation test that the method described in the patent merely gathers

23 data from, for example, the Internet for analysis. *See Cybersource*, 2011 U.S. App. LEXIS

6, 7, and 8 are invalid under Section 101, second paragraph because the claims are not patentable subject matter.

B. The '867 Patent

The asserted claims of the '867 patent are all invalid for failure to comply with 35 USC §101. The prior art references identified in charts F-1 to F-4 (e.g., Ericsson, TS 25.212 v 2.1.0, Sarwate et al., Lampert and Ogawa) teach all structural elements of the claims. The only possible difference between those references and the claims relates to how the codes are ordered (e.g., whether a particular code is the 1st or the 2nd primary scrambling code). However, deciding to order a set of codes in a particular way is nothing more than a mathematical algorithm and is not patentable subject matter.

C. The '516 Patent

Claims 16-20, 23, and 24 are invalid under section 101 and/or section 112 for reciting a mixed method and apparatus, and thus failing to recite a single statutory class, and for providing inadequate notice of what infringes and what does not.

IX. DOCUMENTS RELATED TO PRIOR ART PURSUANT TO PATENT L.R. 3-4(a) AND (b)

Pursuant to Patent L.R. 3-4 and based on its investigation to date, Apple is producing concurrently with these Invalidity Contentions documents within its possession, custody and control required to accompany the Invalidity Contentions. Documents relating to L.R. 3-4(a) bear Bates numbers APLNDC-WH0000021212 - APLNDC-WH0000021454 and APLNDC-WH-A 0000000001 - APLNDC-WH-A 0000000326. Documents relating to Patent L.R. 3-4(b) bear Bates numbers APLNDC-WH0000000001 - APLNDC-WH0000021211, APLNDC-WH-A 0000000327 - APLNDC-WH-A 0000008498, and APLNDC-WH-A 0000008499.

Upon entry of an appropriate protective order that addresses procedures for access to the

parties' source code, and upon receiving the consent of any necessary non-parties, Apple will

make available the source code in its possession sufficient to show the operation of the accused

functionality.

Dated: October 7, 2011

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CERTIFICATE OF SERVICE

I, Michael Waller, hereby certify that on October 7, 2011, true and correct copies of **PLAINTIFF AND COUNTERCLAIM-DEFENDANT APPLE INC.'S INVALIDITY CONTENTIONS** were served on the following counsel of record at the addresses and manner indicated:

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EXHIBIT L-1

Exhibit L-1

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EXHIBIT L-1: Invalidity Chart for US Patent No. 7,698,711

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Samsung has asserted claims 1-2, 7-10, and 15-18 of U.S. Patent No. 7,698,711 to Moon-Sang Jeong ("the '711 patent").

The Sony Ericsson W800i mobile phone and W800i User Guide (1st Ed.)("W800i User Guide")(APLNDC-WH0000006685-6727) anticipate all asserted claims. To the extent the Sony Ericsson W800i mobile phone or W800i User Guide are found to lack any element of the asserted claims, the W800i mobile phone and User Guide renders each of claims 1-2, 7-10, and 15-18 of the '711 patent invalid as obvious under 35 U.S.C. §103(a) in view of either U.S. Patent No. 6,928,648 to Wong et al. ("Wong"), U.S. Patent No. 6,526,041 to Shaffer et al. ("Shaffer"), or Qusay H. Mahmoud, "The J2ME Mobile Media API" published online at http://developers.sun.com/mobility/midp/articles/mmapioverview, June 2003 ("Mahmoud")(APLNDC-WH0000006738-6749).

Claim 1	Sony Ericsson W800i mobile phone and User Guide in view of Wong, Shaffer, or Mahmoud
1. A multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability, the multi-tasking method comprising:	The **Sony Ericsson W800i** mobile phone performs "a multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability." • See, e.g., **Sony Ericsson W800i User Guide** (1st Ed., May 2005) at pp.16-17: "Getting to know your phone" including "Internet Services", "Entertainment" including "MusicDJ", "File Manager", "Contacts", "Radio", "Camera", Messaging", "Walkman", and "Organizer" Sony Ericsson W800i User Guide at p.7 • "Music is key in Sony Ericsson's first Walkman branded handset, the W800i. Outstanding audio quality combines with a user friendly interface to make for a compelling music experience fully capable of replacing lower-end MP3 players." Review of Aug. 29, 2005 published online at http://infosyncworld.com/reviews/n/6112.html (APLNDC-WH0000006682-6684) The **Mahmoud** article teaches "a multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability."

Exhibit L-2

<u>**EXHIBIT L-2: Invalidity Claim Chart for US Patent No. 7,698,711**</u>

Samsung has asserted claims 1-2, 7-10, and 15-18 of U.S. Patent No. 7,698,711 to Moon-Sang Jeong ("the '711 patent").

U.S. Patent No. 7,123,945* to Kokubo et al. ("Kokubo") anticipates each of claims 1-2, 7-10, and 15-18 of the '711 patent. To the extent the Kokubo reference is found to lack any element of the asserted claims, Kokubo combined with U.S. Published Application 2005/0083642 to Senpuku et al. ("Senpuku") renders the asserted claims invalid as obvious under 35 U.S.C. §103(a). Alternatively, the same combination of references invalidates the asserted claims under 35 U.S.C. §103(a) in view of either U.S. Patent No. 6,928,648 to Wong et al. ("Wong"), U.S. Patent No. 6,526,041 to Shaffer et al. ("Shaffer"), or Qusay H. Mahmoud, "The J2ME Mobile Media API" published online at http://developers.sun.com/mobility/midp/articles/mmapioverview, June 2003 ("the Mahmoud article")(APLNDC-WH0000006738-6749).

*citations herein are provided to published US patent as noted; the specification also published as U.S. Published Application No. 2003/0119562

Claim 1	Kokubo and Senpuku in view of Wong, Shaffer, or Mahmoud
1. A multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability, the multi-tasking method comprising:	Kokubo teaches "[a] multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability": • "The operation of the portable telephone 100 is started when the portable telephone 100 is turned on, and it is ended unconditionally when the power is turned off. The portable telephone 100 is, for example, equipped with functions such as creation, transmission and reception of e-mail, accessing and browsing the Internet, gaming, taking pictures, placing phone calls, music reproduction and the like as application software (tasks). The portable telephone 100 is capable of processing a plurality of application software (tasks) in parallel, and of generating icons for each of the application software (tasks) and switching between the tasks." Kokubo at Col. 10:52-62 Senpuku teaches "[a] multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability": • "[0048] In addition, the speaker 13 is not limited to reproducing voice signals but can also reproduce music and sound effects from electrical signals formed in a synthesizer circuit, which is not shown in the figure." Senpuku at ¶0048 The Mahmoud article teaches "a multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability." • "The Mobile Media API (MMAPI) is an optional package that supports multimedia applications on J2ME-enabled devices. This standard Java specification, defined by the Java Community Process (JCP) in JSR 135, is highly flexible. It has been designed to run with any protocol and format; for example, it doesn't specify that the implementation must support particular transport protocols such as HTTP or Real-Time Transport Protocol (RTP), or media formats such as MP3, MIDI, or MPEG-4 This article provides a technical overview of MMAPI's architecture and APIs, followed by a tutorial in which sample code demonstrates how MMAPI can be used to build multimedia-rich wireless Java applications. A complete media player is developed, and steps for testing it are provided." Mahmoud article at Abstract

Exhibit L-3

EXHIBIT L-3: Invalidity Chart for U.S. Patent No. 7,698,711

Samsung has asserted claims 1-2, 7-10, and 15-18 of U.S. Patent No. 7,698,711 to Moon-Sang Jeong ("the '711 patent").

The **Sony Ericsson K700** mobile phone and/or the K700 User Guide (1st Ed.)("K700 User Guide")(APLNDC-WH0000007166-7269) anticipate all asserted claims. To the extent the Sony Ericsson K700 mobile phone and/or K700 User Guide is found to lack any element of the asserted claims, the K700 mobile phone and User Guide renders each of claims 1-2, 7-10, and 15-18 of the '711 patent invalid as obvious under 35 U.S.C. §103(a) in view of either U.S. Patent No. 6,928,648 to Wong et al. ("Wong"), U.S. Patent No. 6,526,041 to Shaffer et al. ("Shaffer"), or Qusay H. Mahmoud, "The J2ME Mobile Media API" published online at http://developers.sun.com/mobility/midp/articles/mmapioverview, June 2003 ("Mahmoud")(APLNDC-WH0000006738-6749).

U.S. Patent No. 7,698,711	Sony Ericsson K700 mobile phone and User Guide in view of Wong, Shaffer, or Mahmoud
1. A multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability, the multi-tasking method comprising:	The **Sony Ericsson K700** mobile phone performs "a multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability." • "Sony Ericsson showcases the new K700 camera phone featuring the latest in imaging, multimedia, and entertainment functions, as well as a rich offering of advanced messaging and connectivity technologies. This includes, for example, playing video clips, capturing images and video with the built-in camera and listening to the built-in FM radio. Form follows function in this attractively designed phone which features dual fronts; one for the phone features and the other for a true camera look and feel, moving closer to design-language inspired by Sony's digital cameras. The intuitive user interface provides easy access to all features, including download services such as ringtones, images, videos and games. A powerful application solution for Java 3D with cutting edge graphics, multi-player games, is featured on the K700, integrating smoothly into the Sony Ericsson games offering. With its FM radio, up to 20 favorite radio stations can be stored in the K700 with the preset function. The radio, or even MP3 files, can be listened to through a portable handsfree or through the phone's speaker." Sony Ericsson Press Release, dated March 21, 2004, titled "Sony Ericsson brings unique camera style to mobile imaging with the K700 camera phone" • See, e.g., **Sony Ericsson K700 User Guide** (1st Ed., March 2004) at p9: "Getting to know your phone" including "Internet Services", "Entertainment" including "MusicDJ", "Camera", "File Manager", "Phonebook Contacts", "Radio", Messaging", "Media Player", "Organizer", and "Display".

Exhibit L-4

EXHIBIT L-4: Invalidity Claim Chart for US Patent No. 7,698,711

Samsung has asserted claims 1-2, 7-10, and 15-18 of U.S. Patent No. 7,698,711 to Moon-Sang Jeong ("the '711 patent").

The Nokia 3300 mobile phone together with the Nokia 3300 Extended User's Guide ("Nokia 3300")(APLNDC-WH0000006990-7140) renders each of claims 1-2, 7-10, and 15-18 of the '711 patent invalid as obvious under 35 U.S.C. §103(a) in view of U.S. Publication No. 2003/0236814 to Miyasaka et al ("Miyasaka") and/or U.S. Patent No. 7,123,945 to Kokubo et al. ("Kokubu") and any of U.S. Patent No. 6,928,648 to Wong et al. ("the Wong '648 patent"), U.S. Patent No. 6,526,041 to Shaffer et al. ("the Shaffer '041 patent"), or Qusay H. Mahmoud, "The J2ME Mobile Media API" published online at http://developers.sun.com/mobility/midp/articles/mmapioverview, June 2003 ("the Mahmoud article")(APLNDC-WH0000006738-6749).

Claim 1	Nokia 3300 and Extended User's Guide in view of Miyasaka and/or Kokubo and any of Wong, Shaffer, or Mahmoud
1. A multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability, the multi-tasking method comprising:	The Nokia 3300 and Extended User's Guide teach "a multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability". • "You can listen to MP3 and AAC music files stored on the memory card in your phone with the Music player, or you can listen to the Radio." See, e.g., Nokia 3300 and Extended User's Guide at p.38. Miyasaka teaches "[a] multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability": • "[0002] In recent years, a general-purpose digital signal processor (DSP) of a program control system which is capable of performing compression processing of data such as audio and video data at a high speed (285MIPS, for instance) has been developed, and used for a wide variety of devices such as modem, CD, MD, DVC and DVD devices as well as a digital cell phone and mobile AV equipment. A computer device incorporating such a processor, for example, a cell phone, realizes a telephone call function by causing the processor to execute a program for calling. However, there have been increasing user demands for the added functions of this cell phone, such as a music recording and/or reproducing device, a TV receiver, and even a device capable of concurrently recording music, watching TV and answering a phone if he/she gets a call. Therefore, there has been increasing tendencies to make this type of computers multifunctional by implementing a multitask control device capable of extending and modifying the functions easily so as to realize various functions." Miyasaka at ¶ 2. Kokubo teaches "[a] multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability": • "The operation of the portable telephone 100 is started when the portable telephone 100 is turned on, and it is ended unconditionally when the power is turned off. The portable telephone 100 is, for example, equipped with functions such as creation, transmission and reception of e-mail, accessing and browsing the Internet, gaming, taking pictures, placing phone calls, music reproduction and the like as application software (tasks). The portable telephone 100 is capable of processing a plurality of application software (tasks) in parallel, and of generating icons for each of the application software (tasks) and switching between the tasks." Kokubo at Col. 10:52-62

Exhibit L-5

<u>**Exhibit L-5 Invalidity Claim Chart for US Patent No. 7,698,711**</u>

Samsung has asserted claims 1-2, 7-10, and 15-18 of U.S. Patent No. 7,698,711 to Moon-Sang Jeong ("the '711 patent").

U.S. Published Application No. 2003/0236814 to Miyasaka et al ("Miyasaka") and/or US Patent No. 7,123,945 to Kokubo et al. ("Kokubo") in combination with US Published Application No. 2004/0077340 to Forsyth ("Forsyth") renders each of claims 1-2, 7-10, and 15-18 of the '711 patent invalid as obvious under 35 U.S.C. §103(a) in view of U.S. Patent No. 6,928,648 to Wong et al. ("the Wong patent"), U.S. Patent No. 6,526,041 to Shaffer et al. ("the Shaffer patent"), or Qusay H. Mahmoud, "The J2ME Mobile Media API" published online at http://developers.sun.com/mobility/midp/articles/mmapioverview, June 2003 ("the Mahmoud article")(APLNDC-WH0000006738-6749).

Claim 1	Miyasaka and/or Kokubo in view of Forsyth and any of Wong, Shaffer, or Mahmoud
1. A multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability, the multi-tasking method comprising:	Miyasaka teaches "[a] multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability": • "[0002] In recent years, a general-purpose digital signal processor (DSP) of a program control system which is capable of performing compression processing of data such as audio and video data at a high speed (285MIPS, for instance) has been developed, and used for a wide variety of devices such as modem, CD, MD, DVC and DVD devices as well as a digital cell phone and mobile AV equipment. A computer device incorporating such a processor, for example, a cell phone, realizes a telephone call function by causing the processor to execute a program for calling. However, there have been increasing user demands for the added functions of this cell phone, such as a music recording and/or reproducing device, a TV receiver, and even a device capable of concurrently recording music, watching TV and answering a phone if he/she gets a call. Therefore, there has been increasing tendencies to make this type of computers multifunctional by implementing a multitask control device capable of extending and modifying the functions easily so as to realize various functions." Miyasaka at ¶ 2. Kokubo teaches "[a] multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability": • "The operation of the portable telephone 100 is started when the portable telephone 100 is turned on, and it is ended unconditionally when the power is turned off. The portable telephone 100 is, for example, equipped with functions such as creation, transmission and reception of e-mail, accessing and browsing the Internet, gaming, taking pictures, placing phone calls, music reproduction and the like as application software (tasks). The portable telephone 100 is capable of processing a plurality of application software (tasks) in parallel, and of generating icons for each of the application software (tasks) and switching between the tasks." Kokubo at Col. 10:52-62 Forsyth teaches "[a] multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability": • "[0002] This invention relates to a mobile telephone device with an idle screen. The term `mobile telephone device` refers to any kind of small screen (e.g. A5 size or