Exhibit 3

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TEXAS TYLER DIVISION

MIRROR WORLDS, LLC	Civil Action No. 6:08-CV-88 LED
Plaintiff,	JURY TRIAL DEMANDED
v.	JUKI IRIAL DEMANDED
APPLE INC.	
Defendant.	
APPLE INC.	
Counterclaim Plaintiff	
v.	
MIRROR WORLDS, LLC, MIRROR WORLDS TECHNOLOGIES, INC.	

Counterclaim Defendants.

EXPERT REBUTTAL REPORT OF JOHN LEVY, Ph.D. REGARDING VALIDITY

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opinion, it would not have been obvious to one of ordinary skill in the art to combine the references in the manner suggested by Dr. Feiner.

iii. Mander '724 does not disclose "automatically archiving the received documents."

173. The following claims recite "automatically archiving the received documents" or are dependent claims that refer back to such a claim: '313 patent claims 1, 2, 3, 4. This limitation is not disclosed in Mander '724.

174. Dr. Feiner asserts that this limitation is disclosed in Retrospect and that it would have been obvious to one of ordinary skill in the art to combine that reference with Mander '724 to arrive at the claimed invention. Feiner, Ex. 1B, pp. 10-11. I disagree for the reasons explained above. It would not have been obvious to one of ordinary skill in the art to combine the references in the manner suggested by Dr. Feiner.

2. Lucas '330/Workscape

175. Dr. Feiner asserts that Lucas '330 and Workscape anticipate and/or render obvious the following claims of the Mirror Worlds patents:

(1) '227 patent claims 13, 14, 15, 16, 17, 20, and 22.

(Feiner, pp. 97-98).

176. Dr Feiner also asserts that Lucas '330 and Workscape render obvious the following claims of the Mirror Worlds patents in view of Lotus Magellan, Mander '724/Piles project, Retrospect, SDM/SDMS, On Location, and/or Memoirs:

- (1) '227 patent claims 13, 14, 15, 16, 17, 20, 22;
- (2) '313 patent claims 1, 2, 3, 4, 9, 10, 11;
- (3) '427 patent claims 1, 2, 5, 7, 8, 9, 10, 13, 15, 16, 17, 18, 19, 22, 24, 25, 26, 29, 31, 32, 33, 34, 37, 39; and
- (4) '999 patent claim 1.

(Feiner, p. 98).

177. I disagree with Dr. Feiner—the above claims are not anticipated or rendered obvious by the references he cites.

a. Lucas '330 and Workscape Do Not Anticipate Any of the Asserted Claims of the Mirror Worlds Patents.

178. Lucas '330 describes a system that addresses a problem with conventional file systems—namely that documents in directories, or containers, are "hidden from the user." ('330, col. 1, ll. 25-31). The system solves this problem by "display[ing] documents either in a completely free-form, user controlled configuration or as strands." ('330, col. 1, ll. 56-60). A strand has a parent document and child documents, which are configured along a two dimensional path through a three-dimensional display space. (*Id.*, col. 1, ll, 60-63). Strands are "a mechanism for arranging screen objects without hiding them." (*Id.*, col. 8, ll. 45-46).

179. "Workscape" refers to a number of documents that Apple produced shortly before the deadline of this expert report. My review of those documents is ongoing and I reserve the right to amend this expert report based on that review. Based on my review to date, my conclusions explained below with respect Lucas '330 are not changed by Workscape.

i. Lucas '330 does not disclose a "stream."

180. '227 patent claims 13, 14, 15, 16, 17, 20, 22 either recite the term "stream" or are dependent claims that refer back to a claim that does.

181. An explanation of the term "stream" is provided above in connection with Mander'724. No such "stream" is disclosed in Lucas '330.

182. *First*, Lucas '330 does not describe an underlying time-ordered collection of documents, which is one aspect of a stream. Instead, Lucas '330 is directed only to the display of documents in a strand.

183. Dr. Feiner asserts that Lucas '330 discloses a stream, but fails to identify in Lucas any such time-ordered collection of documents. *See, e.g.*, Feiner, Ex. 4A, p. 8.

184. *Second*, Lucas '330 does not describe a system intended to handle an unbounded number of items (another aspect of a stream, as described above). Lucas '330 displays all the documents within a strand—which addresses the problem, identified in Lucas '330, that in conventional file systems documents in directories are hidden from the user. '330, col. 1, ll. 25-31, col. 8, ll. 46-47 ("Strands are not containers, but rather are a mechanism for arranging screen objects without hiding them."). That number cannot be unbounded.

185. *Third*, Lucas '330 does not provide for or disclose including *future* documents in strands, which is yet another aspect of a stream. Dr. Feiner identifies no such disclosure in his report. *See, e.g.*, Feiner, Ex. 4A, p. 50.

186. *Fourth*, Lucas '330 does not provide a system in which the location of file storage is transparent to the user. Indeed, Lucas '330 addresses only the graphical display of strands and does not address file location generally. Dr. Feiner does not address this aspect of a stream.

ii. Lucas '330 does not disclose a "main stream."

187. '227 patent claims 13, 14, 15, 16, 17, 20, 22 either recite the term "main stream" or are dependent claims that refer back to a claim that does..

188. An explanation of the term "main stream" is provided above in connection with Mander '724. No such "main stream" is disclosed in Lucas '330.

189. There is no disclosure in Lucas '330 of a stream at all, much less a stream containing each data unit, or document, received by or generated by the computer system (*i.e.*, a "main stream"). Dr. Feiner asserts that "Lucas describes generating a main strand (e.g., set of documents that follow a path corresponding to 'a two dimensional line through a three dimensional display space') of data units," citing Lucas '330 at 1:57-61, 9:8-13, 8:51-53, 8:33-

35, 9:26-29, Fig. 1. Feiner, Ex. 4A, p. 8. But Lucas '330, in fact, never disloses a strand containing each data unit received by or generated by a computer system. It also never uses the term "main strand."

iii. Lucas '330 does not disclose a "substream for containing data units only from the main stream."

190. '227 patent claims 13, 14, 15, 16, 17, 20, 22 either recite the term "substream" or are dependent claims that refer back to a claim that does.

191. An explanation of the phrase "substream for containing data units only from the main stream." is provided above in connection with Mander '724. No such substream is disclosed in Lucas '330.

192. *First,* as explained above, Lucas '330 does not disclose a stream or main stream and therefore cannot disclose a substream of the main stream.

193. *Second*, as described in the '227 patent, a substream presents the user with a "'view' of a document collection," such as the main stream. '227, col. 4, lines 51-54. A substrand, which is what Dr. Feiner points to for this limitation (*see* Feiner, Ex. 4A, pp. 8, 11-12) clearly does not provide such a view of a document collection. Indeed, Lucas '330 only describes displaying an entire strand, which may be visually separated into substrands by one or more knots. *See, e.g.*, Lucas '330, Fig. 9. It does not describe a substrand that acts as a filter on a strand.

iv. Lucas '330 does not disclose including each data unit in the main stream "according to the timestamp in the respective chronological indicator." 194. '227 patent claims 13, 14, 15, 16, 17, 20, 22 either recite including each data unit in the main stream "according to the timestamp in the respective chronological indicator" or are dependent claims that refer back to a claim that does.

195. Again, Lucas '330 does not disclose a *main stream* and therefore cannot disclose this limitation, which relates to including documents in the *main stream*. In addition, Lucas '330 does not disclose including a data unit in a strand, much less a main stream, according to the data unit's timestamp. The portions of Lucas '330 cited by Dr. Feiner do not disclose this feature. Feiner, Ex. 4A, pp. 43-44.

v. Lucas '330 does not disclose "persistent streams."

196. '227 patent claims 13, 14, 15, 16, 17, 20, 22 either recite "persistent streams" or are dependent claims that refer back to a claim that does.

197. As set forth in the Court's preliminary claim construction Order, a "persistent streams" are "streams that are dynamically updated." No such persistent streams are disclosed in Lucas '330. To the contrary, as described in Lucas '330, a FIND operation may be used to create a strand—in which case once the FIND operation completes, there are no more updates to the strand. *See* Lucas '330, col. 18, ll. 50-56.

198. Dr. Feiner asserts that Lucas '330 discloses "maintaining streams of data units through searching that are persistent streams," citing Lucas at col 8, ll. 7-10. Feiner, Ex. 4A, p. 47. I disagree. The cited portion of Lucas '330 describes "a special FIND tool," serving as an IN BOX, that identifies shared files directed to a user's attention and brings them into the user's workspace. This "special FIND tool" is in essence a mechanism for receiving documents on a local computer system. It is not a persistent stream or substream as claimed in the Mirror Worlds patents.

vi. Lucas '330 does not disclose selecting each timestamp "from the group consisting of past, present, and future times."

199. '227 patent claim 14 recites selecting each timestamp "from the group consisting of past, present, and future times." As explained above, Lucas '330 lacks this limitation. In particular, it does not provide for or disclose including *future* documents in a strands, or a stream. Dr. Feiner identifies no such disclosure in his report. *See, e.g.*, Feiner, Ex. 4A, p. 50.

vii. Lucas '330 does not disclose "receiving from a user one or more indications of one or more selected segments of the streams corresponding to one or more selected intervals of time" and "displaying the selected segments."

200. '227 patent claim 16 recites "receiving from a user one or more indications of one or more selected segments of the streams corresponding to one or more selected intervals of time" and "displaying the selected segments." These limitations are not disclosed in Lucas '330.

201. Dr. Feiner cites the "fish-eye lens effect" described at Lucas '330, col. 5, lines14-21 for this limitation (Feiner, Ex. 4A, p. 72), but that effect essentially enlarges a portion of a strand that is already displayed—it does not result in displaying a selected segment of the strand.

202. Dr. Feiner also states that "users can specify certain subsets of documents to be displayed in 'substrands.'" (Feiner, Ex. 4A, pp. 72-73). But strands are displayed in their entirety—a user does not select a substrand for display.

b. Lucas '330 and Workscape Do Not Render Any of the Asserted Claims of the Mirror Worlds Patents Obvious in View of the References Cited by Dr. Feiner.

203. Dr. Feiner asserts that various claims, identified above, are rendered invalid by Lucas '330 and Workscape in view of Lotus Magellan, Mander '724/Piles project, Retrospect, SDM/SDMS, On Location, and/or Memoirs. Those references are treated separately within this report and I have identified limitations of the asserted claims that each lack. I have also addressed separately within this report whether a person of ordinary skill in the art would be motivated to combine various references in the manner that Dr. Feiner suggests in his report. I address below additional limitations in the asserted claims that are absent in Lucas '330 and Workscape.

i. Lucas '330 does not disclose a "stream," "document stream operating system" or a "stream-based operating system."

204. '313 patent claims 1, 2, 3, 4; '427 patent claims 1, 2, 5, 7, 8, 9, 10, 13, 15, 25, 26, 29, 31; and '999 patent claim 1 recite a "stream," "document stream operating system" or a "stream-based operating system," or are dependent claims that refer back to a claim that does.

205. Each of the terms "stream," "document stream operating system," and "streambased operating system," require a stream, as explained above in connection with Mander '724.

206. No such "stream" is disclosed in Lucas '330.

207. Dr. Feiner asserts that this feature is found in other references addressed in this report and that it would have been obvious to one of ordinary skill in the art to combine those references with Lucas '330 to arrive at the claimed invention. I disagree. None of the references cited by Dr. Feiner disclose a stream, document stream operating system or a stream-based operating system. Moreover, it would not have been obvious to one of ordinary skill in the art to combine the references in the manner suggest by Dr. Feiner for the reasons explained above.

ii. Lucas '330 does not disclose a display facility that displays "at least selected [ones of said] document representations"

208. '427 patent claims 1, 2, 5, 7, 8, 9, 10, 13, 15, 16, 17, 18, 19, 22, 24, 25, 26, 29, 31 either recite a display facility that displays "at least selected [ones of said] document

representations" or are dependent claims that refer back to a claim that does. This limitation is not disclosed in Lucas '330.

209. An explanation of a display facility that displays "at least selected [ones of said] document representations" is provided above in connection with Mander '724. Again, the claimed display facility is capable of displaying a segment of a large number of document representations, since only a segment of that sequence need be displayed at any one time.

210. No such display facility is provided in Lucas '330. As explained above strands are displayed in their entirety only. Indeed, Lucas '330 teaches away from such a feature—explaining that a problem with known user interfaces, which Lucas '330 addresses, is that users "typically cannot see the documents inside a container without opening up the container." '330, col. 1, ll. 29-31.

iii. Lucas '330 does not disclose "automatically archiving documents received from diverse applications in different formats such that the archived documents can be searched for documents meeting selected criteria,"
"automatically archiving the received documents together with said time-based indicators," or "selectively searching said archived documents for documents meeting selected criteria and generating and displaying a substream comprising documents identified in said searching."

211. The following claims recite "automatically archiving documents received from diverse applications in different formats such that the archived documents can be searched for documents meeting selected criteria," and "automatically archiving the received documents together with said time-based indicators" or are dependent claims that refer back to such a claim: '313 patent claims 9, 10, 11.

212. '313 patent claim 11 additionally recites "selectively searching said archived documents for documents meeting selected criteria and generating and displaying a substream comprising documents identified in said searching."

213. The above limitations are not disclosed in Lucas '330.

214. Dr. Feiner asserts that this limitation is disclosed in Retrospect and Magellan and that it would have been obvious to one of ordinary skill in the art to combine those references with Lucas '330 to arrive at the claimed invention. Feiner, Ex. 4B, pp. 127-28. I disagree. As explained above in connection with Mander '724, Retrospect and Magellan do not disclose automatically archiving documents received from diverse applications in different formats such that the archived documents can be searched for documents meeting selected criteria, automatically archiving the received documents together with said time-based indicators and selectively searching said archived documents for documents meeting selected criteria and generating and displaying a substream comprising documents identified in said searching.

215. In addition, as also explained above, in my opinion, it would not have been obvious to one of ordinary skill in the art to combine the references in the manner suggested by Dr. Feiner.

iv. Lucas '330 does not disclose "automatically archiving the documents and indicators in consistent format for selective retrieval"

216. The following claims either recite "automatically archiving the documents and indicators in consistent format for selective retrieval" or are dependent claims that refer back to such a claim: '427 patent claims 1, 2, 5, 7, 8, 9, 10, 13, 15. This limitation is not disclosed in Lucas '330.

217. Dr. Feiner asserts that this limitation is disclosed in Retrospect and Magellan and that it would have been obvious to one of ordinary skill in the art to combine those references

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with Lucas '330 to arrive at the claimed invention. Feiner, Ex. 4C, pp. 20-21. I disagree. As explained above in connection with Mander '724, Retrospect and Magellan do not disclose automatically archiving documents and indicators in consistent format for selective retrieval. In addition, as also explained above, in my opinion, it would not have been obvious to one of ordinary skill in the art to combine the references in the manner suggested by Dr. Feiner.

v. Lucas '330 does not disclose "automatically archiving the received documents."

218. The following claims recite "automatically archiving the received documents" or are dependent claims that refer back to such a claim: '313 patent claims 1, 2, 3, 4. This limitation is not disclosed in Lucas '330.

219. Dr. Feiner asserts that this limitation is disclosed in Retrospect and Magellan and that it would have been obvious to one of ordinary skill in the art to combine those references with Lucas '330 to arrive at the claimed invention. Feiner, Ex. 4B, pp. 40-41. I disagree. As explained above, in my opinion, it would not have been obvious to one of ordinary skill in the art to combine the references in the manner suggested by Dr. Feiner.

3. Thompson-Rohrlich et al. (the "'852 patent")⁵

220. Dr. Feiner asserts that U.S. Patent No.5,504,852 by Thompson–Rohrlich et al. (the "'852 patent") and Inside Macintosh render obvious the following claims of the Mirror Worlds patents in view of Mander '724/Piles project, Lucas '330/Workscape, Lotus Magellan, Retrospect, SDM/SDMS, On Location, and/or Memoirs :

(1) '227 patent claims 13, 14, 15, 16, 17, 20, 22;

⁵ Dr. Feiner states that "Thompson-Rohrlich '852 discloses a "Viewer" that 'acts as an intelligent folder' (what Apple now calls a 'smart folder')." In so doing, he incorrectly implies that "smart folders," as found in Apple's Mac OS X 10.4 (Tiger) and beyond implement the system disclosed in the '852 patent. That is incorrect. A "smart folder" in Tiger and beyond is simply a stored search query—it does not contain aliases and other aspects of the system disclosed in the '852 patent.

- (2) '313 patent claims 1, 2, 3, 4, 9, 10, 11;
- (3) '427 patent claims 1, 2, 5, 7, 8, 9, 10, 13, 15, 16, 17, 18, 19, 22, 24, 25, 26, 29, 31, 32, 33, 34, 37, 39; and
- (4) '999 patent claim 1.

(Feiner, pp. 98-99).

221. I disagree with Dr. Feiner—the above claims are not rendered obvious by the references he cites.

a. The '852 Patent and Inside Macintosh Do Not Render Any of the Asserted Claims of the Mirror Worlds Patents Obvious in View of the References Cited by Dr. Feiner.

222. Dr. Feiner's Report cites the '852 patent and the HFS file system of Macintosh

computers as described in the Inside Macintosh document as prior art. The HFS file system of

the Macintosh (at the System 7 generation) is a conventional file system using named files and

folders in a hierarchical structure (folders are contained in other folders) to organize user data.

223. The '852 patent is primarily directed to performing searches and displaying the

results in a window within the desktop metaphor:

"A method for creating and organizing aliases for files stored on a computer system in which the stored files are searched according to defined search criteria. For files meeting the search criteria, aliases to the files are created, and the aliases are organized together in a display window for presenting the results of the search to the computer user. ..." (Abstract)

224. The primary artifact of '852 is a Viewer. "A Viewer acts as an intelligent folder

that continually searches for files meeting a specification supplied by the user." (1:59-61)

i. The '852 Patent and Inside Macintosh do not disclose a "stream."

225. The following claims either recite a "stream," "document stream operating system" or a "stream-based operating system," or are dependent claims that refer back to such a

4. **MEMOIRS**

246. Dr. Feiner asserts that "MEMOIRS: A Personal Multimedia Information System," by M.W. Lansdale, D.R. Young, & C.A. Bass, The Proceedings of the Fifth Conference of the British Computer Society Human Computer Interaction Specialist Group University of Nottingham 5–8 September 1989 (APMW0076640–APMW0076649) ("MEMOIRS") anticipate and/or renders obvious the following claims of the Mirror Worlds patents:

(1) '227 patent claims 13, 17, and 20.

(Feiner, p. 156).

247. Dr Feiner also asserts that MEMOIRS renders obvious the following claims of the Mirror Worlds patents in view of Retrospect, Lucas '330/Workscape, Thompson–Rohrlich '852/Smart Folders, Lotus Magellan, SDM/SDMS, On Location, and/or Mander '724/Piles project:

- (1) '227 patent claims 13, 14, 15, 16, 17, 20, 22;
- (2) '313 patent claims 1, 2, 3, 4, 9, 10, 11;
- (3) '427 patent claims 1, 2, 5, 7, 8, 9, 10, 13, 15, 16, 17, 18, 19, 22, 24, 25, 26, 29, 31, 32, 33, 34, 37, 39; and
- (4) '999 patent claim 1.

(Feiner, p. 99-100).

248. I disagree with Dr. Feiner—the above claims are not anticipated or rendered obvious by the references he cites.

a. Memoirs Does Not Anticipate Any of the Asserted Claims of the Mirror Worlds Patents.

249. The MEMOIRS paper by Lansdale et al. describes psychological principles for user interactions with documents, and an experimental system for exploring those interactions. The basic system uses a "hypertext-style database," which means a list of links from text information to the items referred to by the text. It also has links to "a time-structured network (a 'Timebase')," which is essentially a calendar or list of dates. As the Abstract says, "the user interface ... is complex ... [and] supports a wide range of strategies and methods for retrieval of information."

250. MEMOIRS comments that due to inexact user recall, users tend to "leave documents around in semi-organized piles." Further, over time, "piles become bigger and more disorganized" so that it is difficult to scan and retrieve information from them.

251. MEMOIRS attempts to overcome some of these problems by having a system in which scanned documents are entered into the system, tagged with keywords by the user, and filed in the system. The user chooses his own keywords for each document. The system tags each document with the date it was entered in the system.

252. The system has a representation of a diary (a British term for a calendar/datebook), which is displayed on the screen as a linear, left-to-right sequence of boxes, one for each day. A day in which documents exist is shown as a dark box, as opposed to a white box for days with no documents.

253. The 'Timebase' referred to in MEMOIRS is the datebook. User events can also be noted in the datebook.

254. MEMOIRS has a search facility. Results of a search are shown in a conventional window as a collection of icons.

255. MEMOIRS system is vastly different from the stream paradigm described and claimed in the Mirror Worlds' patents. Although similar to the stream technology in that MEMOIRS uses time as a basis of organization, MEMOIRS lacks the essential features of the asserted claims, as explained below.

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256. MEMOIRS does not describe an underlying time-ordered collection of documents, which is one aspect of a stream. Instead, it separates out a diary, files, and attribute libraries, etc.... (MEMOIRS, APMW0076646, APMW0076647).

257. MEMOIRS does not disclose a mainstream, nor does it disclose persistent substreams,

i. Memoirs does not disclose a "main stream."

258. The "Timebase" of the Memoirs system does not include all data units in the way a main stream does. In fact, there is a specific teaching to keep the Diary separate from the Timebase. Furthermore, attribute libraries (i.e., icons, color, sound, keywords, etc...) are also kept separate from the "Timebase." (MEMOIRS, APMW076646-47).

ii. MEMOIRS does not disclose "substreams" (persistent or otherwise)

259. A search performed on a "Timebase" does not create substreams. Instead it highlights time periods of the "Timebase" where relevant documents exist. (MEMOIRS, APMW0076647). To get search results, a search results window is created, in which documents are not arranged in time-order. (MEMOIRS, APMW0076647). There is no disclosure of persistence.

iii. MEMOIRS does not disclose "archiving"

260. MEMOIRS specifically states that "there are no archival areas." (MEMOIRS, APMW0076648).

iv. MEMOIRS does not disclose any of the visual aspects of Mirror Worlds Patents

261. MEMOIRS has a very specific interface that has a row of containers representing days with each container including files. (MEMOIRS, APMW0076647). There is no disclosure

of a receeding foreshortened stack or any three dimensional elements. (MEMOIRS, APMW0076647) Similarly, there are no glance views. (MEMOIRS, APMW0076647).

b. MEMOIRS Does Not Render Any of the Asserted Claims of the Mirror Worlds Patents Obvious in View of the References Cited by Dr. Feiner.

262. Memoirs is a system that specifically teaches away from creation of a main stream by creating a separate diary component that is specifically made to exist within and external to the "Timebase." A main stream would take away that functionality.

5. Spatial Data-Management

263. Dr. Feiner asserts that "Spatial Data–Management" by Richard A. Bolt ("SDM") and various aspects of the research on a Spatial Data Management System ("SDMS") conducted by the Architecture Machine Group at the Massachusetts Institute of Technology in the 1970s anticipate and/or render obvious claims of the patents-in-suit either alone or in combination with other prior art references such as Mander '724/Piles and Lucas '330/Workscape. (Feiner, pp. 148-49). I disagree.

264. SDMS, as indicated by its name, is directed to the concept of using spatial relationships to assist with recall. Richard A. Bolt, the author of the reference, describes the "distinguishing characteristic [of SDMS] is that it exploits the **user's sense of spatiality** for purposes of organizing and retrieving data. . . ." APMW076307. SMDS seeks to create "a spatially **definite** "virtual" world that can be interactively explored and navigated." APMW0076310 (emphasis added). SDMS is almost the antithesis of the system described in the Mirror Worlds' Patents. SMDS was complex (describing three screens and multiple control interfaces), did not teach the concept of time ordering, did not describe streams, and did not describe substreams.

265. SDM is a book describing an experimental environment at MIT. The interaction of the user with three screens using various navigational devices is described.

266. The main navigational screen is a small one, reproduced below. It shows the typical two-dimensional nature of SDMobjects.



The logical relationship between these two views is akin to a mapping key, which places a particular image within a larger locale. The large screen effectively functions as a "window" and, as we shall see later, a "magnifying glass" onto Dataland.

The "world view" monitor serves specifically as a navigational aid to the user in getting around Dataland. The large display of whatever portion of Dataland is so 'close up" that the user would get lost

267. easily if there were not always on view a

Dataland as it appears on the "world view" monitor to the user's right. Notice highlighted "you-are-here" rectangle situated over a map of northeastern United States located in upper-left region of Dataland. "You-are-here" marker is translucent, under joystick control, and indicates the region of Dataland visible on the large screen to user's front. 268. A larger screen projects a portion of what is on the navigational screen, as illustrated below with a desk

calendar.



269. A third screen is sometimes used occasionally used to interact with certain types of files that are selected using a first screen.

i. Spatial Data Management Project and the Corresponding System does not disclose a "stream."

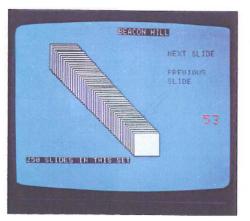
270. SDMS does not disclose a "stream," "document stream operating system," or "stream-based operating system."

271. *First*, SDMS does not describe an underlying time-ordered collection of documents, which is one aspect of a stream. Instead, SDMS relates only to special organization

of data, which is akin to a visual substitute for conventional folders and subdirectories. In fact, adding time-based organization would be contrary to the goal of spatial organization and recognition as time based recognition would either result in a static positioning of documents (if creation date is used) or a constantly changing organization (if the date of update is used).

272. Dr. Feiner states that "SDMS was also capable of organizing and presenting documents such as movies temporally," but his conclusion does not follow from the disclosure. (Feiner, p. 152). SDMS describes an interface for "controlling events that are oriented over a time span" i.e., playback of recordings. This is vastly different from organizing data units over a time span. APMW0076334. SDMS only discusses browsing through a recorded sequence, not organizing a plurality of such sequences much less temporally organizing recorded sequences and other types of data units. Id. *Second*, Dr. Feiner identified two views found on the third screen of the SDMS, as disclosing a visual stream. However, the first view was similar to a

Close-up of slide collection key map used to access videodisc still frames. Region along spine of stacked "slides" permits sliding of cursor arrow by fingertip. Alternately, the captions "Next slide" and "Previous slide" can be tapped for one-by-one viewing, or continuously touched for rapid sequential showing.



The interactive aspect of this key map is that the user can slide a colored-arrow "cursor" along the top edge of the diagonal row of "boxes" representing slides about Boston available to be seen. The analogue for more conventional media is that of remembering a slide tray. Moving the cursor up and down causes slides to be flashed in succession on the large screen as indicated by the finger touching and moving the display cursor.

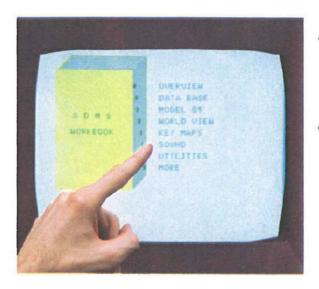
limited pile, and not at-all similar to streams:

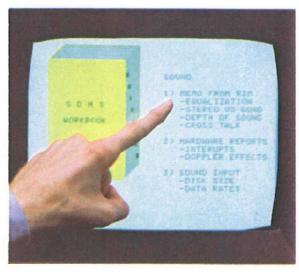
273. APMW0076342

274. According to Richard A. Bolt, the above view is particular to picture slides, and is meant to be is analogous to a slide tray. Accordingly, it is not unbounded in the way a stream would be. Notably, in SDMS, the "row of 'boxes' is displayed in its entirety—no mechanism is

provided for displaying only a portion of the row, while other portions of the row are not displayed. SDMS, in fact, teaches away from such a feature as the purpose of the system is spatial arrangement, and having invisible portions would be contrary to the goal. Finally, this view does not suggest previews.

275. The second view identified by Dr. Feiner, is a mere three dimensional icon representing a book.





Notice that the table of contents can "expand" to show a finer breakdown of content area when the user selects a major heading of interest. In concert with the activity on the key map monitor screen, the main large-screen view will "go to" the section of the book selected by the user through the interactive key map so that the user may read the material.

There is yet further interaction with the data type of book: that of turning its pages. This action is initiated by a specific user action: a page turning gesture given as a right-to-left, top-to-bottom stroke on either of the touch-sensitive pads on the arms of the user chair. Any page can be turned back by a stroke across the pad in the opposite direction. The accompanying visual action is the display of an "animation" of a page actually turning. The upper right-hand corner of the page on view progressively "lifts" away and sweeps leftwards across the screen, immediately revealing the new page below.

276. APMW0076328

277. This icon does not change, and is not representative of multiple documents, as shown in the description above. The icon includes controls to the right of it that can be used to browse through pages in a book, and are displayed on the separate screen. The individual pages have no correlation to the icon that represents the book.

278. *Third*, SDMS does not provide for or disclose including *future* documents in piles, which is yet another aspect of a stream.

279. *Fourth*, the SDMS piles are not a system in which the location of file storage is transparent to the user—indeed, the displayed plane is simply a new form of subdirectory, which require the user to know where specific documents are located.

ii. Spatial Data Management Project and the Corresponding System do not disclose a "main stream."

280. For the same reasons as described above with respect to why SDMS does not disclose a stream, SDMS cannot disclose a main stream.

iii. Spatial Data Management Project and the Corresponding System do not disclose "a substream for containing data units only from the main stream."

281. For the same reasons as described above with respect to why SDMS does not disclose a stream, SDMS can not disclose a substream.

iv. Spatial Data Management Project and the Corresponding System do not disclose including each data unit in the main stream "according to the timestamp in the respective chronological indicator."

282. For the same reasons as described above with respect to why SDMS does not

disclose a stream, SDMS can not disclose including each data unit main stream. As also

discussed above, SDMS is concerned with spatial organization, which is incompatible with temporal organization (which is not disclosed or discussed in Richard Bolt's paper).

v. Spatial Data Management Project and the Corresponding System do not disclose receiving data from various applications

283. Although the SDMS is shown as interacting with various types of data (text, video, image, etc.) there is no teaching of diverse applications that would open this data, instead the data is opened and modified by the SMDS itself.

vi. Spatial Data Management Project does not teach archiving

284. Because SDMS is intended to be traveled visually and spatially, archiving would defeat this, supposed advantage.

vii. Spatial Data Management Project Teaches Away From Combinations That Include Streams and Substreams

285. In order for SDMS to be successful, the environment needs to be largely static. Constant movement of items within the Dataland plane would confuse users. Streams on the other had are constantly changing. Accordingly, a person of ordinary skill in the art would not use the disclosures of SDMS together with any stream technology.

6. AAAI Fall '95 Symposium Paper

286. Dr. Feiner asserts that the AAAI Fall '95 symposium paper by Eric Freeman and Scott Fertig, "Lifestreams: Organizing your Electronic Life," AAAI Fall 1995 Symposium on AI Applications in Knowledge Navigation and Retrieval. (YALE 000551–000558,

APMW0012897–APMW0012903) ("AAAI" or "AAAI Fall '95 symposium paper") anticipates and/or renders obvious the following claims of the Mirror Worlds patents:

(1) '227 patent claims 13, 14, 15, 16, 17, 20, 22;

- (2) '313 patent claims 1, 2, 3, 4, 9, 10, 11;
- (3) '427 patent claims 1, 2, 5, 7, 8, 9, 10, 13, 15, 16, 17, 18, 19, 22, 24, 25, 26, 29, 31, 32, 33, 34, 37, 39; and
- (4) '999 patent claim 1.

(Feiner, p. 100).

287. Dr Feiner also asserts that AAAI Fall '95 symposium paper renders obvious the following claims of the Mirror Worlds patents in view of Mander '724/the Piles Project, Retrospect, Lucas '330/Workscape, Thompson–Rohrlich 852/Smart Folders, Lotus Magellan, SDM/SDMS, On Location, and/or Memoirs:

- (1) '227 patent claims 13, 14, 15, 16, 17, 20, 22;
- (2) '313 patent claims 1, 2, 3, 4, 9, 10, 11;
- (3) '427 patent claims 1, 2, 5, 7, 8, 9, 10, 13, 15, 16, 17, 18, 19, 22, 24, 25, 26, 29, 31, 32, 33, 34, 37, 39; and
- (4) '999 patent claim 1.

(Feiner, p. 100-01).

288. I disagree with Dr. Feiner—this paper is not prior art and therefore the above claims are not anticipated or rendered obvious by it.

289. Furthermore, as described by Dr. Gelernter during his deposition, the AAAI did not disclose archiving documents in a format that is still searchable. (Gelernter 6/18/2009 Tr. 126:3-6). Furthermore, the AAAI failed to disclose browse cards. (Gelernter 6/18/2009 Tr. 125:21-23).

7. TR-1070/Lifestreams

290. Dr. Feiner asserts that the the paper TR–1070 ("The 'Lifestreams' Approach to Reorganizing the Information World," YALEU/DCS/TR 1070 (1995) (YALE000430– YALE000441, APMW0014792–APMW0014802, APMW0026102–APMW0026116)) and/or I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on June 4, 2010 at New York, NY.

John Low John Levy, Ph.D.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document is being served this 4th day of June 2010 via email upon counsel for Apple at the following address:

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/s/ Alexander Solo