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28UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIATV INTERACTIVE DATA
CORPORATION,

Plaintiff,

v.

SONY CORPORATION, et al.,

Defendants.

No. C 10-0475 PJH

**ORDER RE MOTIONS FOR
SUMMARY JUDGMENT**

The parties' motions for summary judgment came on for hearing before this court on October 3, 2012. Plaintiff TV Interactive Data Corporation ("TVI") appeared by its counsel Richard M. Martinez, Patrick M. Arenz, Sarah Hudleston, and Victor C. Chan. Defendants Sony Corporation, Sony Corporation of America, Sony Electronics, Inc., Sony Computer Entertainment, Inc. and Sony Computer Entertainment America LLC (collectively, "Sony") appeared by their counsel Gregory S. Gewirtz, M. Elizabeth Holt, and Jonathan A. David. Having read the parties' papers and carefully considered their arguments and the relevant legal authority, the court hereby rules as follows.

BACKGROUND

Plaintiff TVI was formed by Peter M. Redford in 1990 to develop new technologies in the multimedia and interactive television markets. Between 1997 and 2002, TVI (as assignee from Mr. Redford and his co-inventor Donald S. Stern) obtained a family of patents relating to the integration of interactive media with printed publications such as children's books, magazines, and CD cases.

On July 1, 1994, Mr. Redford and Mr. Stern filed the initial patent application, which subsequently issued as United States Patent No. 5,624,265 ("the '265 patent"). The initial application was followed by additional divisional and continuation applications, which

1 eventually led to the issuance of the four patents-in-suit – United States Patent No.
2 5,597,307 (“the ‘307 patent”), United States Patent No. 5,795,156 (“the ‘156 patent”),
3 United States Patent No. 6,249,863 (“the ‘863 patent), and United States Patent No.
4 6,418,532 (“the ‘532 patent”). The four patents-in-suit share a common specification,¹ and
5 were issued in, respectively, January 1997, August 1998, June 2001, and July 2002.

6 Among other things, the patents disclose a method for automatically launching an
7 application or other process upon the insertion of a disc into a peripheral of a computer
8 system. During prosecution, the inventors differentiated their invention and disclaimed so-
9 called “boot” or “reboot” prior art. This prior art had the limited capacity of starting an
10 application only in association with a booting or rebooting of the device.

11 TVI asserts that over the course of prosecution, Microsoft eliminated the market for
12 TVI – particularly for TVI’s patented “autoplay” invention – by incorporating autoplay in
13 every version of Microsoft Windows. In 2002, TVI sued Microsoft for patent infringement.
14 See TV Interactive Corp. v. Microsoft Corp., C-02-2385 JSW (N.D. Cal.) (“Microsoft”).

15 Microsoft argued that it was not a direct infringer, and that it was the companies
16 selling Windows-installed computers loaded with Windows that were infringing. TVI then
17 filed a parallel suit against various computer manufacturers. See TV Interactive Corp. v.
18 Fujitsu Ltd., C-04-3367 JSW (N.D. Cal.). That litigation, which was filed in August 2004,
19 was limited to the use of the autoplay invention in Windows computers. In December 2004,
20 the parties agreed to stay the case pending the outcome of the Microsoft litigation.

21 Meanwhile, Microsoft filed four motions for summary judgment – a motion for
22 summary judgment of invalidity of the ‘156, ‘863, and ‘532 patents pursuant to 35 U.S.C.
23 § 112 ¶ 2 (indefiniteness); a motion for summary judgment of invalidity under 35 U.S.C.
24 § 102(b) (claims anticipated by prior art), based on Commodore CDTV; a motion for
25 summary judgment of invalidity under 35 U.S.C. § 102(g) (priority of invention by
26 Microsoft); and a motion for partial summary judgment of no willful infringement and limiting

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28 ¹ Where this order cites to the common specification, it is to the ‘532 patent.

1 damages to post-suit inducement. In orders issued on October 13, 2004, the Hon. Jeffrey
2 S. White denied all the motions.

3 Judge White denied the motion relating to the CDTV prior art on the ground that
4 CDTV reboots, and TVI had made clear in prosecution and throughout the Microsoft
5 litigation that rebooting was not TVI's invention. "Rebooting and re-initializing the entire
6 system after every insertion of media is not simply an additional series of steps; it is more
7 accurately a series of operations not contemplated by the construction of TVI's claims."
8 Order Denying Microsoft's Motion for Summary Judgment of Invalidity Pursuant to 35
9 U.S.C. § 102(b) based on Commodore CDTV, at 2.

10 Because the Commodore CDTV system reboots and re-initializes the system
11 whenever a user ejects media and TVI's claimed invention[] is an advance
12 over such reboot systems which can detect each insertion of media after the
13 loading of initialization files without re-initializing the system, and because the
14 proposed interpretation of the claims language would render superfluous its
15 explicit language, the Court finds that Microsoft has failed to meet its high
16 burden of demonstrating by clear and convincing evidence that the
17 Commodore CDTV anticipates every single limitation of TVI's claimed
18 invention.

19 Id. at 3.

20 Shortly before the commencement of trial, the parties reached a settlement, and
21 Microsoft agreed to license the asserted patents.² Before Microsoft signed the deal,
22 however, it filed petitions for reexamination of the validity of the asserted patents before the
23 U.S. Patent and Trademark Office ("PTO"), in light of CDTV. The patent examiner agreed
24 with Microsoft that the modules used by CDTV were covered under the patents' definition
25 of "initialization file." '532 Reexamination, Office Action, at 33 (Nov. 21, 2005). TVI did not
26 dispute that "initialization file" includes modules of code in ROM. '863 Reexamination,
27 Patent Owner's Statement, at 4 (Aug. 7, 2006).

28 However, as in the Microsoft case, TVI distinguished its invention from CDTV on the
basis of CDTV's rebooting requirement. '307 Reexamination, Examiner, Notice of Intent to
Issue Ex Parte Reexam Certificate, at 3 (Oct. 24, 2008). TVI also narrowed several claims

² TVI also dismissed the parallel lawsuit against the computer manufacturers because the license covered their infringement for Windows-based computers as well.

1 in the patents to clarify that the patented method requires that the application or other
2 process be initiated automatically upon insertion of the disk without rebooting or resetting
3 the system.

4 The PTO confirmed the patentability of the asserted independent claims of the '156
5 patent, the '863 patents, and claim 18 of the '307 patent as the claims were originally
6 drafted. The remaining asserted independent claims – claim 1 of the '307 patent and
7 claims 1, 9, and 17 of the '532 patent – were narrowed to confirm that the claims preclude
8 rebooting. Thus narrowed, the claims were determined to be patentable.

9 Once the reexaminations ended, TVI pursued other infringement claims. TVI filed
10 suit against a number of computer manufacturers on October 6, 2009, then dismissed the
11 complaint and refiled the present lawsuit on February 2, 2010 after a patent assignment
12 issue was clarified. TVI originally accused 11 defendant groups of infringement – all of
13 which manufactured or sold DVD or Blu-ray players, which TVI asserted incorporated its
14 patented autoplay technology. All defendants with the exception of the five Sony entities
15 have taken a license and/or been dismissed from the case.

16 With regard to Sony, TVI alleges, among other things, that the Sony defendants
17 have directly and/or indirectly infringed one or more claims of the patents-in-suit. The
18 accused products include Blu-rayDisc® and DVD VIDEO™ players – for example, the Sony
19 BDP-S550 and the Sony DVPNS700HB – as well as the Sony Playstation®3.

20 This case was previously assigned to the Hon. Jeremy Fogel. The court held a
21 claim construction hearing on February 22, 2011, and issued an order on April 15, 2011,
22 construing six disputed terms.³ On August 19, 2011, Sony filed a motion for summary

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24 ³ The disputed terms construed by the court were (1) “**file**” and “**initialization file**,”
25 found in all asserted independent claims, and in claims 1 and 17 of the '532 patent and claim
26 1 of the '863 patent; (2) “**loading**,” found in claim 17 of the '532 patent, claims 1 and 18 of the
27 “'307 patent, and claim 1 of the '156 patent; and “**means for automatically loading an**
28 **initialization file**,” found in claim 1 of the '156 patent and claim 1 of the '863 patent; (3) “**first**
means for checking for a file of first predetermined name” and “**second means for**
checking for a file of second predetermined name,” found in claim 9 of the '863 patent; (4)
“**said file other than said initialization file having a predetermined name that is**
compatible with said initialization file,” found in claims 1 and 17 of the '532 patent and in
claim 1 of the '863 patent; (5) “**returning to said step of automatically enabling**,” found in

1 judgment of invalidity. The hearing was subsequently vacated, the motion was
2 administratively stayed. It was eventually re-noticed to be heard with the present cross-
3 motions for summary judgment.

4 On September 16, 2011, TVI filed a first amended complaint against the defendants
5 remaining in the case as of that date. On September 28, 2011, following Judge Fogel's
6 departure from the court, the case was reassigned to the undersigned district judge.

7 On August 29, 2012, TVI filed a motion for summary judgment as to inequitable
8 conduct, laches, and equitable estoppel, and Sony filed a motion for summary judgment as
9 to inequitable conduct, laches, invalidity under 35 U.S.C. §§ 102 and 103, and non-
10 infringement. Those two motions, plus Sony's earlier-filed motion for summary judgment of
11 invalidity, are now before the court.

12 DISCUSSION

13 A. Legal Standard

14 A party may move for summary judgment on a "claim or defense" or "part of . . . a
15 claim or defense." Fed. R. Civ. P. 56(a). Summary judgment is appropriate when there is
16 no genuine dispute as to any material fact and the moving party is entitled to judgment as a
17 matter of law. Id.

18 A party seeking summary judgment bears the initial burden of informing the court of
19 the basis for its motion, and of identifying those portions of the pleadings and discovery
20 responses that demonstrate the absence of a genuine issue of material fact. Celotex Corp.
21 v. Catrett, 477 U.S. 317, 323 (1986). Material facts are those that might affect the outcome
22 of the case. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). A dispute as to a
23 material fact is "genuine" if there is sufficient evidence for a reasonable jury to return a
24 verdict for the nonmoving party. Id.

25 Where the moving party will have the burden of proof at trial, it must affirmatively
26 demonstrate that no reasonable trier of fact could find other than for the moving party.

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28 claims 1 and 18 of the '307 patent; and (6) "without rebooting the [host] device," found in
claim 1 of the '307 patent and claims 1, 9, and 17 of the '532 patent.

1 Soremekun v. Thrifty Payless, Inc., 509 F.3d 978, 984 (9th Cir. 2007). On an issue where
2 the nonmoving party will bear the burden of proof at trial, the moving party can prevail
3 merely by pointing out to the district court that there is an absence of evidence to support
4 the nonmoving party's case. Celotex, 477 U.S. at 324-25. If the moving party meets its
5 initial burden, the opposing party must then set out specific facts showing a genuine issue
6 for trial in order to defeat the motion. Anderson, 477 U.S. at 250; see also Fed. R. Civ. P.
7 56(c), (e).

8 When deciding a summary judgment motion, a court must view the evidence in the
9 light most favorable to the nonmoving party and draw all justifiable inferences in its favor.
10 Anderson, 477 U.S. at 255; Hunt v. City of Los Angeles, 638 F.3d 703, 709 (9th Cir., 2011).

11 B. Sony's Motions for Summary Judgment of Invalidity

12 Sony argues that certain asserted claims in the patents-in-suit are invalid under 35
13 U.S.C. § 112, and also under 35 U.S.C. §§ 102 and 103. Once a patent has been issued,
14 its claims are presumed valid. 35 U.S.C. § 282. A challenger that attacks the validity of
15 patent claims in civil litigation has a statutory burden to prove invalidity by clear and
16 convincing evidence. In re Baxter Int'l, Inc., 678 F.3d 1357, 1364 (Fed. Cir. 2012) (citing 35
17 U.S.C. § 282); see also Microsoft Corp. v. i4i Ltd., ___ U.S. ___, 131 S.Ct. 2238, 2242 (2011).

18 Clear and convincing evidence is such evidence that produces "an abiding
19 conviction that the truth of [the] factual contentions are 'highly probable.'" Colorado v. New
20 Mexico, 467 U.S. 310, 316 (1984). Should the challenger fail to meet that burden, the court
21 will find not that the patent is valid (as it is already presumed valid), but simply that the
22 challenger did not carry its burden of establishing invalidity in the particular case before the
23 court. In re Baxter, 678 F.3d at 1364 (citations and quotations omitted).

24 1. Invalidity under § 112

25 Sony contends that certain asserted claims are invalid under 35 U.S.C. § 112, ¶ 1
26 (written description), ¶ 2 (definiteness), and ¶ 6 (structure for means plus function claims).

27 The "written description" requirement is as follows:
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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

35 U.S.C. § 112 ¶ 1.

“The purpose of the written description requirement is to ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor’s contribution to the field of art as described in the patent specification.” In re Katz Interactive Call Processing Patent Litig., 639 F.3d 1303, 1319 (Fed. Cir. 2011) (quotations omitted). The specification does not need to use the same language as the claims in order to satisfy the written description requirement. Yingbin-Nature (Guangdong) Wood Indus. Co., Ltd. v. Int’l Trade Comm’n, 535 F.3d 1322, 1334 (Fed. Cir. 2008). Nor does it demand “either examples or an actual reduction to practice.” Ariad Pharms., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1352 (Fed. Cir. 2010) (en banc).

The test for sufficiency of the written description is “whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” Id. 1351; see also Crown Packaging Tech., Inc. v. Ball Metal Bev. Container Corp., 635 F.3d 1373, 1380 (Fed. Cir. 2011). This test requires an “objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art.” Ariad, 598 F.3d at 1351.

Whether a claim meets the written description requirement is a question of fact. Crown Packaging Tech., 635 F.3d at 1380. “[T]he level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology.” Id. The question whether the patent complies with the written description requirement “is amenable to summary judgment in cases where no reasonable fact finder could return a verdict for the nonmoving party.” PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299, 1307 (Fed. Cir. 2008); see also Streck, Inc. v. Research & Diagnostic Sys., Inc., 665 F.3d 1269, 1285-86 (Fed. Cir.

1 2012).

2 The “definiteness” and “regards as his invention” requirement provides as follows:

3 The specification shall conclude with one or more claims particularly pointing
4 out and distinctly claiming the subject matter which the applicant regards as
his invention.

5 35 U.S.C. § 112 ¶ 2.

6 “Only claims ‘not amenable to construction’ or ‘insolubly ambiguous’ are indefinite.”
7 Trading Techs. Int’l, Inc. v. eSpeed, Inc., 595 F.3d 1340, 1358 (Fed. Cir. 2010) (citations
8 omitted); see also Honeywell Int’l, Inc. v. Int’l Trade Comm’n, 341 F.3d 1332, 1338 (Fed.
9 Cir. 2003). To prove indefiniteness, a party must “show[] by clear and convincing evidence
10 that a skilled artisan could not discern the boundaries of the claim” based on the intrinsic
11 evidence or knowledge of the relevant area of art. Halliburton Energy Servs., Inc. v. M-I
12 LLC, 514 F.3d 1244, 1249-50 (Fed. Cir. 2008); see also Invitrogen Corp. v. Clontech Labs,
13 Inc., 429 F.3d 1052, 1072 (Fed. Cir. 2005). In addition, a finding of indefiniteness
14 invalidates the patent claims entirely, rather than gives meaning to them. Exxon Research
15 & Eng’g Co. v. United States, 265 F.3d 1371, 1376 (Fed. Cir. 2001).

16 With respect to the “regards as his invention” aspect of the definiteness requirement,
17 the Federal Circuit has held that when the plain language of the claims are clearly
18 inconsistent with the specification, the claims are invalid for not properly claiming what the
19 inventor regards as his invention. Allen Eng’g Corp. v. Bartell Indus., Inc., 299 F.3d 1336,
20 1349 (Fed. Cir. 2002).

21 Finally, the requirements applicable to means-plus-function claims are as follows:

22 An element in a claim for a combination may be expressed as a means or
23 step for performing a specified function without the recital of structure,
24 material, or acts in support thereof, and such claim shall be construed to
cover the corresponding structure, material, or acts described in the
specification and equivalents thereof.

25 35 U.S.C. § 112 ¶ 6.

26 Under this requirement, there must be some structure in the specification that
27 corresponds to the claimed function or the claim may be rendered indefinite under 35
28 U.S.C. § 112 ¶ 2. The corresponding structure, furthermore, includes only the features

1 necessary to perform the claimed functions. See Northrup Grumman Corp. v. Intel Corp.,
2 325 F.3d 1346, 1352 (Fed. Cir. 2003) (“A court may not import into the claim features that
3 are unnecessary to perform the claimed function.”) (citation omitted).

4 In its motion, Sony contends that the following terms render the claims invalid under
5 § 112: (a) “automatically loading an initialization file;” (b) “compatible with said initialization
6 file;” (c) “returning to said step of automatically enabling [an interrupt];” and (d) “first [and
7 second] means for checking.” The court finds that the motion must be DENIED, based on
8 Sony’s failure to establish invalidity by clear and convincing evidence. In addition, it
9 appears that as to at least some of the terms, Sony is improperly arguing for
10 reconsideration of the prior order construing claims.

11 a. “automatically loading an initialization file” (Claim 1 of ‘156 patent,
12 Claims 1 and 9 of ‘863 patent, and Claims 1 and 17 of ‘532 patent)

13 The parties previously agreed that “automatically loading an initialization file” was
14 the claimed function in the means-plus-function term “means for automatically loading an
15 initialization file.” The court construed “loading” as “copying into memory,” and construed
16 “initialization file” as “a file which, alone or in combination with other file(s), contains
17 information or data used or referenced to start up or configure software and/or hardware
18 and is not then used to perform a further process or used as a driver.” Claim Construction
19 Order at 8. The term “automatically” was not construed.

20 Sony contends that there is no support in the specification for “automatically loading
21 an initialization file,” and that the specification discloses only “automatically loading” an
22 autostart driver, which is used to look for certain files on inserted discs upon booting or
23 start-up of the host device (citing ‘532 patent, 21:59-62, 21:67-22:4, 22:23-26, 19:25-30,
24 26:11-17, 30:58-61, Fig. 5A). Sony asserts that the specification says only that the
25 initialization files are “checked for” and “used” during booting – which it claims is not the
26 same thing as “loading” (citing id., 22:19-28.

27 Under the prior claim construction, and as agreed by the parties, an initialization file
28 cannot also be a driver such as an autostart driver. See Claim Construction Order at 7-8,

1 18. For this reason, Sony argues, an initialization file cannot be automatically loaded to
2 further perform a process, like an autostart driver, which is automatically copied into
3 memory during booting and is used to perform the further process of starting an application
4 (citing '532 patent, 4:34-37 – if file of first predetermined name exists, “autostart driver
5 automatically executes the file which in turn starts the appropriate application”). Thus,
6 Sony asserts, the term “automatically loading an initialization file” renders the asserted
7 claims invalid for lack of a written description.

8 In opposition, TVI contends that “checking for” and “using” the initialization file
9 necessarily involves “automatically loading” the file. Based on the declaration of its expert
10 Dr. Andrew Wolfe, TVI argues that the specification does in fact disclose automatically
11 loading an initialization file. See '532 patent, 22:19-23 (“[d]uring booting, host device 120
12 checks for initialization files such as startup files and configuration files. On finding a valid
13 initialization file, host device 120 uses the initialization file during booting.”). In addition, TVI
14 contends, the specification discloses CONFIG.SYS as an example of an initialization file in
15 the IBM PC (citing id. 21:66-22:6). TVI asserts that one of ordinary skill in the art would
16 understand that CONFIG.SYS is loaded (copied into memory) during start up of an IBM
17 PC; and that the PTO examiner also adopted this view during reexamination, noting that
18 installation files such as CDTV’s ROM modules are “loaded into memory.”

19 Dr. Wolfe explains that in 1994 the CONFIG.SYS initialization file was loaded into
20 the memory of an IBM PC host device during the boot process of the Microsoft DOS
21 operating system. When powered on, the IBM PC began the boot process for Microsoft
22 DOS, and during booting, as explained in the written description for the Redford patents,
23 the computer system would “check for” and “use” the CONFIG.SYS file. However, before
24 the IBM PC used the CONFIG.SYS file, the boot process first copied (“loaded”) the file into
25 the system’s memory. Dr. Wolfe contends that this process was well-known in the field of
26 computer science in 1994. Thus, TVI argues, it follows that one of ordinary skill in the art in
27 1994 would have understood that “checking for” and “using” a CONFIG.SYS file during
28 booting of an IBM PC host device necessarily involved copying the CONFIG.SYS file into

1 the memory of the IBM PC.

2 TVI also notes that the PTO examiner during the original prosecution of the '156
3 patent concluded that "checking for" and "using" an initialization file is the corresponding
4 structure for the claim term "means for automatically loading an initialization file." Finally,
5 TVI argues, during the technology tutorial before Judge White in the Microsoft case,
6 Microsoft (which created Microsoft DOS) explained that an initialization file is "checked for"
7 and "used" and also agreed that the initialization file is "loaded."

8 The court finds that Sony has not met its burden of showing by clear and convincing
9 evidence that this term renders the claims invalid. Moreover, while there does not appear
10 to be any dispute regarding whether the loading is performed "automatically," there does
11 appear to be a dispute as to whether, e.g., one of ordinary skill in the art would interpret the
12 "checking for/using" process disclosed in the specification as "loading" a file.

13 b. "compatible with said initialization file" (Claims 1 and 17
14 of '532 patent, Claim 1 of '863 patent)

15 In construing the term "said file other than said initialization file having a
16 predetermined name that is compatible with said initialization file" as meaning "a file having
17 a predetermined name, which name is consistently used by the initialized host device to
18 seek a file," the court noted that the only dispute between the parties involved the meaning
19 of the words "compatible with." Claim Construction Order at 17.

20 Sony's position was that "compatible with" meant "started up by," and that no file
21 could be considered "compatible with" the initialization file in the sense that files are
22 "compatible with" the autostart driver. TVI argued that the specification supported the use
23 of "compatibility" in its ordinary meaning of "capable of existing or operating together in
24 harmony." The court agreed with TVI, finding no indication that the inventors intended
25 "compatible with" in any other than its ordinary meaning. Id. at 18.

26 The court found further that TVI's proposed construction of "a file having a
27 predetermined name, which name is consistently used by the initialized host device to seek
28 a file," captured the claim's requirement that the file be compatible with the initialization file,

1 given that the embodiment described in the specification includes an initialization file,
2 autostart driver, and file on the storage medium, which are all designed to work in harmony
3 (even though the patent expressly contemplated embodiments that do not include an
4 autostart driver). Id. at 19.

5 In the present motion, Sony argues that the court’s construction renders the claim
6 invalid under § 112 ¶¶ 1 and 2, because the only support in the specification for
7 “compatibility” of a file name with a file is the compatibility of the predetermined file name
8 with the autostart driver file, not the initialization file as described in the claim language
9 (citing ‘532 patent, 22:35-50). Similarly, Sony argues, the “consistently used” language that
10 TVI urged for its claim construction relates to consistent use by the autostart driver to
11 execute the file with the predetermined name (citing id., 22:34-42, 22:57-59, 4:30-38).
12 Sony claims that other uses of the word “compatible” in the specification refer to other
13 types of compatibility that is unrelated to file name compatibility, such as “compatible
14 applications,” “IBM compatible personal computer,” “algorithm compatible with MPEG/1
15 specification,” “compatible peripheral,” and “CD-ROM compatible write once optical disk.”

16 Based on the specification, Sony asserts that the role of a file having a
17 predetermined name that is “compatible with” a file means it has to be compatible with the
18 file that will execute it – which is necessarily the autostart driver, and not the initialization
19 file. Indeed, Sony contends, it makes no sense to have a predetermined name that is
20 “compatible with” the initialization file, where the purpose of the claimed invention is to have
21 a file with a predetermined name that is further used to perform a process.

22 In Sony’s view, the court’s construction is unworkable, because an initialized host
23 device alone does not consistently seek the file having a predetermined name, as any
24 booted up computer would be an “initialized host device.” According to Sony, it is only
25 when an autostart driver is installed that the host device consistently seeks the file with the
26 predetermined name upon insertion of a storage media.

27 In opposition, TVI argues that the term “compatible with” does not render the claims
28 in which it appears invalid, and that the fact that the exact language of the claim does not

1 appear in the specification is not significant. Relying on the declaration of its expert Dr.
2 Wolfe, TVI asserts that the specification provides ample description of a file having a
3 predetermined name, which name is consistently used by the initialized host device to seek
4 a file.

5 The court finds that Sony has not met its burden of showing by clear and convincing
6 evidence that this term renders the claims invalid. The specification shows the host device
7 being configured with an autostart driver that is a separate executable image, but it also
8 discloses that “the instructions to a host device shown in Figs. 5A, 5B, and 5C can be
9 issued in other forms suitable for the host device (such as commands to the operating
10 system).” See ‘532 patent, 22:7-25:41. This shows that the claimed invention is not limited
11 to an autostart driver embodiment, and, at a minimum, raises a question of fact as to
12 whether one of ordinary skill in the art would have understood in 1994 that the inventors
13 possessed a system with “a file having a predetermined name, which name is consistently
14 used by the initialized host to seek a file.”

15 c. “returning to said step of automatically enabling” (Claim 1 and
16 dependent Claim 18 of ‘307 patent)

17 Claim 1 of the ‘307 patent recites

18 A method of automatically starting up a process in a host device based on
19 insertion of a storage media into a peripheral, comprising:

20 booting an operating system of the host device, said step of booting including
21 checking for an initialization file;

22 automatically enabling an interrupt;

23 automatically checking for a file other than said initialization file in at least one
24 removable storage media associated with at least one peripheral on
25 occurrence of said interrupt, said removable storage media being encoded
26 with electronic content including said file;

27 automatically loading at least a portion of the electronic content from said
28 removable storage media in response to finding said file during said step of
automatically checking;

automatically executing an application identified by or associated with said
file; and

returning to said step of automatically enabling without rebooting the host

1 device.

2 The present dispute involves language in the last step in this claim – “returning to
3 said step of automatically enabling.” Sony’s position is that the specification requires that
4 the interrupt must be disabled before it can be re-enabled, and also that the court’s
5 construction renders the claims indefinite because the “said step” is the step of
6 automatically enabling an interrupt.

7 In the claim construction in the Microsoft case, Judge White construed “returning to
8 said step of automatically enabling” as meaning “returning to a state in which the host
9 device (e.g., computer) is prepared to process requests for attention to or from hardware
10 and/or software.” In the claim construction in the present case, TVI asked Judge Fogel to
11 adopt this construction. However, Sony argued that the term should be construed as “re-
12 enabling a previously disabled interrupt to detect another removable storage media
13 associated with the peripheral.”

14 Judge Fogel rejected Sony’s proposed construction. Judge Fogel noted that it
15 improperly added the limitations of disabling the interrupt, and re-enabling the interrupt, and
16 that Judge White had rejected similar language proposed by Microsoft, both because the
17 proposed construction imported limitations from the specification into the claim language,
18 and because the proposed construction reads a limitation found in a dependent claim into
19 an independent claim. Claim Construction Order at 20.

20 Judge Fogel also noted that Sony argued that the specification teaches specifically
21 that the driver disables the interrupt before returning to the “step of automatically enabling
22 the interrupt,” see ‘532 patent, Fig. 5B, step 527, and that it was standard practice at the
23 time of the invention to disable the interrupt before performance of the associated interrupt
24 service routine so that the interrupt would not re-fire and disrupt the routine’s processing.
25 Judge Fogel agreed with Judge White, however, that limitations from the specification
26 cannot be read into the claims where the patentee has not demonstrated an intent to limit
27 the claim scope using words or expressions of exclusion or restriction.

28 Finally, Judge Fogel noted that dependent Claim 16 describes “the method of Claim

1 1 further comprising disabling said interrupt prior to said step of automatically executing
2 said file,” and that TVI had argued that Sony’s proposed construction would violate the
3 doctrine of claim differentiation.

4 Here, Sony again argues that the specification requires that the interrupt must be
5 disabled before it can be re-enabled. Sony claims that the only embodiments disclosed in
6 the specification where there is a “returning” to a step of enabling the interrupt are those of
7 Figs 5B and 5C, which require returning to enable an interrupt that was disabled.
8 According to Sony, Fig. 5B discloses enabling and disabling a hardware interrupt, and Fig.
9 5C discloses enabling and disabling a software interrupt. In both cases, an interrupt is
10 “enabled” (turned on) (Fig. 5B, step 513, Fig. 5C, step 545), and the host device “waits for”
11 the interrupt (Fig. 5B, step 515, Fig. 5C, step 547).

12 Sony contends that the specification further explains that after an interrupt occurs,
13 the autostart driver checks for a specific file on the media, and if the file is found, the device
14 looks for another file on the media; if either file is not found, the driver returns to the step
15 below the enabling step – “wait for interrupt;” if files with predetermined names are found,
16 the next step is that the driver “disables” the interrupt (citing Fig. 5B, step 527, Fig. 5C, step
17 566). Sony notes that “[t]he disabling of interrupts allows [the] autostart driver . . . to
18 execute an application without being interrupted by user insertion of a removable storage
19 media” (citing 532 patent, 23:63-65). Then, Sony asserts, after the application has
20 terminated, the driver returns to the step of enabling the interrupt (citing Fig. 5B, step 513,
21 Fig. 5C, step 545). At this point, the autostart driver “goes via branch 530 back to step
22 513” (“enable interrupt”) which allows the autostart driver to continue to be responsive to
23 the insertion of storage media (citing ‘532 patent, 24:10-15).

24 Sony argues that as construed, this term does not require the host device to again
25 disable the interrupt upon returning to “said step of automatically enabling [the interrupt].”
26 Rather, it permits the host device, after finding the file other than the initialization file and
27 executing the application, to skip the enabling step and merely return to a ready state,
28 where it is prepared to process requests for attention to or from hardware and/or software.

1 Sony contends that a claim that is construed to omit a required step lacks written
2 description support because it is broader than what the applicants invented.

3 Sony also argues that Judge Fogel’s construction renders the claims indefinite,
4 because the claims recite the step of “returning to the step of automatically enabling” the
5 interrupt; and since one cannot enable an interrupt unless it is disabled, a construction that
6 provides that the host device is enabling an already-enabled interrupt (or skipping the
7 required enabling step) renders the claims nonsensical and indefinite because it is
8 impossible to enable something that is not disabled.

9 In opposition, TVI argues that the written description reasonably discloses to one of
10 ordinary skill in the art the step of automatically returning to said step of automatically
11 enabling – that is, the system returns to a state in which the host device is prepared to
12 process requests to or from hardware and/or software. TVI notes that the court specifically
13 found that the inventors chose not to state that it is necessary in every case to disable the
14 interrupts. See Claim Construction Order at 22. TVI contends that Sony has presented no
15 good reason to relitigate the construction of this claim term.

16 TVI also cites to Dr. Wolf’s opinion that the specification reasonably conveys that the
17 inventors were in possession of a system that did not require a disabling and re-enabling
18 step, and that as of the time of filing in 1994, an interrupt could be disabled prior to
19 executing a program, or the interrupt could simply remain enabled during execution.

20 The court finds that Sony has not met its burden of showing by clear and convincing
21 evidence that this term renders the claims invalid. As the court understands it, Sony’s
22 position is that because this claim recites a series of steps, with the last one being
23 “returning to said step of automatically enabling,” and because the third step listed in the
24 claim is “automatically enabling an interrupt,” the phrase “automatically enabling” in the last
25 step must necessarily be interpreted to mean automatically enabling an interrupt. And
26 since (according to Sony) the court’s construction does not require enabling the interrupt, it
27 is broader than the specification and therefore renders the term indefinite.

28 However, Sony has not addressed the problem of claim differentiation. Claim 16

1 depends from Claim 1, and comprises the additional step of “disabling said interrupt prior to
2 said step of automatically executing said file. The court agrees with Judge Fogel’s analysis
3 in the Claim Construction Order – that it is reasonable to construe Claim 16 as
4 demonstrating that the patentees knew how to include a limitation of disabling the interrupt,
5 and to include that limitation in Claim 16, and chose not to include it in Claim 1. See Claim
6 Construction Order at 21-22.

7 d. “first [and second] means for checking” (Claim 9 of ‘863 patent)

8 This term, which includes “first means for checking for a file of a first predetermined
9 name” and “second means for checking for a file of a predetermined name” is a means-
10 plus-function limitation governed by § 112 ¶ 6. During the claim construction, the parties
11 agreed as to the claimed function (“checking for a file of a first [or second] predetermined
12 name”), but disagreed as to the claimed structures in those terms. Sony asserted that
13 unless the court added particular limitations to the construction, it would be so broad that
14 the claim would be invalid under 35 U.S.C. § 112 ¶ 2.

15 In a means-plus-function claim in which the disclosed structure is a computer or
16 microprocessor, which is programmed to carry out an algorithm, the disclosed structure is
17 not the general purpose computer, but rather the special purpose computer that is
18 programmed to perform the disclosed algorithm. WMS Gaming, Inc. v. Int’l Game Tech.,
19 184 F.3d 1339, 1349 (Fed. Cir. 1999). Here, both sides agreed that the corresponding
20 structure was a “host device (e.g. computer)” that was “programmed to perform the
21 disclosed algorithm,” but disagreed as to exactly what the disclosed algorithm was.

22 TVI’s position was that the disclosed algorithm is “using the first/second
23 predetermined name to determine if a file with that name is present in or accessible from
24 the storage media,” while Sony contended that the disclosed algorithm is slightly different
25 for the two terms – with regard to “first predetermined name” it is “initially seeking, upon
26 detection of a storage media insertion into the peripheral, a security key file of a
27 predetermined name on the detected storage media;” and with regard to second
28 predetermined name, it is “seeking, upon confirming a valid security key in the file of the

1 second predetermined name, a batch file of a predetermined name on the detected storage
2 media.”

3 Judge Fogel’s view was that the dispute essentially concerned “the degree of
4 specificity required in order for the structures to correspond to the functions asserted in the
5 claim.” Claim Construction Order at 14. The court noted that Sony claimed that one skilled
6 in the art would understand from the specification that the “file of a first predetermined
7 name” is a certain kind of file – a security key file – and that the “file of a second
8 predetermined name” is another particular kind of file – an executable batch file, and that
9 without such limitations the terms would be so broad that the claim would be invalid under §
10 112 ¶ 2; while TVI argued that Sony’s proposed structures improperly read limitations from
11 the specifications into the claims. Id. at 14-15.

12 The parties agreed that the only recited function for “first means” was “checking for a
13 file of a first predetermined name, and the court found that the structure linked to the
14 function recited in the claim is “a host device (e.g. computer) programmed to perform the
15 disclosed algorithm of using the first predetermined name to determine if a file with the
16 name is presented in or accessible from the storage medium, and equivalents thereof.” Id.
17 at 15-16.

18 The court found that it was “clear from the specification that the process of checking
19 for a file of a first predetermined name is completed within decision box 517,” and that
20 “Step 519 – checking to see if a security key is present in a file of a first predetermined
21 name – is not a part of the recited function and thus is not a claim limitation.” Id. at 15.⁴
22 The court also noted that where TVI intended to claim a structure related to the security
23 keys disclosed in the specification, it did so expressly, citing as an example, claim 5 of the
24 ‘156 patent, where TVI claimed a “means for comparing a key stored in said file of said first
25 predetermined name with a hard coded key” separately from the “first means for checking
26

27 ⁴ The court noted Sony’s argument that TVI’s proposed construction rendered the claim
28 invalid under § 112 ¶ 2, and commented that while the claims should be construed to preserve
their validity, the court was not permitted to redraft claims for that purpose. Id. n.6.

1 for a file of a first predetermined name.” Id. (citing ‘156 patent, claim 5).

2 Similarly, the court noted, the parties agreed that the only recited function for the
3 “second means” was “checking for a file of a second predetermined name,” and found that
4 it was apparent that the process for checking for a file of second predetermined name was
5 completed within decision box 524. See ‘532 patent, 22:46-54. At the same time, the court
6 continued, both the claim language and the specification provide specific content for a “file
7 of a second predetermined name” – requiring “a means for starting up a process from said
8 file having said predetermined name,” and that “said means for starting up” must “contain a
9 sequence of instructions to be executed to start up said process in response to said second
10 means of checking finding said file of said second predetermined name.” ‘863 patent, claim
11 9; see Claim Construction Order at 16.

12 The court noted further that the specification states that “[e]very file having a second
13 predetermined name . . . contains a sequence of application start-up instructions to be
14 executed to start an application” (citing ‘156 patent, 21:51-55), and that the specification
15 also states that “[a]t the very least, a file with second predetermined name . . . must be
16 present on a storage media to be compatible with an autostart driver which seeks a file of
17 the second predetermined name” (citing id., 21:46-50). The court concluded that while the
18 claim language and specification require that “a file of a second predetermined name”
19 contain a sequence of instructions for starting a process, the construction of that phrase is
20 distinct from the means associated with performing the function of “checking for” a file of
21 that name. Claim Construction Order at 16.

22 In means-plus-function terms, “[f]eatures that do not perform the recited function do
23 not constitute corresponding structures and thus do not serve as claim limitations.”
24 Northrop Grumman, 325 F.3d at 1352. For example, signals that are generated by “the
25 means for monitoring,” are not part of the structure that performs the function of “generating
26 . . . control signals.” Id. at 1352-53. Analogously, the content of the “file of a second
27 predetermined name,” cannot be part of the structure of the “means for checking for a file
28 of a second predetermined name.” Claim Construction Order at 17.

1 Here, Sony argues that the specification discloses only one algorithm for performing
2 the function of “checking for a file of first [and second] predetermined name,” which Sony
3 claims comprises initially checking for, upon detection of a storage media, a security key
4 file of a predetermined name on the storage media; and then checking for a batch file of a
5 second predetermined name after confirming that there is a valid security key. Sony
6 contends that if the court’s construction does not include the disclosed algorithm of
7 checking for a security key file and a batch file, these terms are invalid because they cover
8 structure broader than disclosed in the specification.

9 Specifically, Sony asserts that the only algorithm disclosed for checking for a file of a
10 first/second predetermined name is Fig. 5B, and its discussion in the specification (‘523
11 patent, 23:1-5, 23:23-26, 23:45-48, 22:51-55, 23:1-24:3), which disclose checking for a
12 security key file (i.e., DISGOKEY.EXE) and then executing a batch file containing
13 application startup instructions (e.g., DISGO.BAT). Sony argues that the only “file of a first
14 predetermined name” that is described in the specification is the file “DISGOKEY.EXE,”
15 which is a security key file, and that the only “file of a second predetermined name” that is
16 described in the specification is the file “DISGO.BAT.”

17 During claim construction, the court commented that Step 519 – checking to see if a
18 security key is present in the file of a first predetermined name – is not part of the recited
19 function and thus is not a claim limitation. Sony argues, however, that step 519 is not
20 actually checking to see if a security key is present, but rather is what Sony calls a
21 “separate comparison step” that may be used to verify if the security key file is valid once it
22 is found. Thus, Sony asserts, the disclosed algorithm for “checking” still checks for the
23 security key and batch files, but stops there and does not require performing the next, extra
24 security algorithm of comparing bitmaps.

25 In opposition, TVI contends the court already considered and rejected Sony’s
26 argument that unnecessary algorithms from the specification must be imported into the
27 structures corresponding to the functions “checking for a file of a first [second]
28 predetermined name.”

1 TVI asserts that the specification specifically discloses the algorithms of “using the
2 first [second] predetermined name to determine if a file with that name is present in or
3 accessible from the storage media, and equivalents thereof” through text and flow charts,
4 as decision boxes 517 and 524 in Fig. 5B both identify the process of checking for a file of
5 a predetermined name. In addition, TVI argues, the specification describes the algorithm in
6 prose that uses and looks for a file with a unique name, such as DISGO, which has been
7 determined ahead of time and is present in storage media (citing 532 patent, 22:35-50).

8 A patentee can express an algorithm in any understandable terms – mathematical
9 formula, prose, flow chart, or any other manner that provides sufficient structure. Finisar
10 Corp. v. DirecTV Group, Inc., 523 F.3d 1323, 1340 (Fed. Cir. 2008). TVI asserts the
11 disclosures in the patent are sufficient under the law, and that Sony is improperly
12 attempting to add additional structure. TVI contends that the court properly determined that
13 the corresponding structure need not include unnecessary features related to “security
14 keys” and “batch files” as Sony continues to argue.

15 The court finds that Sony has failed to meet its burden of showing by clear and
16 convincing evidence that this term renders the claims invalid. The court is also persuaded
17 by the analysis in the Claim Construction Order. Moreover, while it is true that the
18 specification mentions use of the types of files that Sony says are “required,” it makes clear
19 that the files are being mentioned as examples, not as requirements of the structure.

20 2. Invalidity under §§ 102 and 103

21 Sony argues that the patents-in-suit are invalid under 35 U.S.C. § 102(g) (priority of
22 invention) as against Microsoft Windows 95; are invalid under 35 U.S.C. § 103 for
23 obviousness, based on DO or CDTV, in combination with CD-I Designer’s Overview; and
24 are invalid under 35 U.S.C. § 102(a) (priority of invention) and/or § 103 (obviousness)
25 based on JP ‘155 (a Japanese patent) alone or in view of UNIX Internals and/or articles.

26 a. Invalidity under § 102(g)

27 Under 35 U.S.C. § 102(g),

28 a person shall not be entitled to a patent if before such person’s invention

1 thereof, the invention was made in this country by another inventor who has
2 not abandoned, suppressed, or concealed it. In determining priority of
3 invention under this subsection, there shall be considered not only the
4 respective dates of conception and reduction to practice of the invention, but
 also the reasonable diligence of one who was first to conceive and last to
 reduce to practice, from a time prior to conception by the other.

5 35 U.S.C. § 102(g)(2). Thus, a challenger claiming invalidity of a patent due to prior
6 invention can show either that another inventor reduced the invention to practice first, or
7 that another inventor was the first party to conceive of the invention and then exercised
8 reasonable diligence in reducing that invention to practice. See Teva Pharm. Indus. Ltd. v.
9 Astrazeneca Pharms. LP, 661 F.3d 1378, 1383 (Fed. Cir. 2011).

10 Invalidity by prior invention under § 102(g) is a form of anticipation. See Hybritech,
11 Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1379 (Fed. Cir. 1986); see also Net
12 MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1369 (Fed. Cir. 2008). For prior art to
13 anticipate under § 102, it must meet every element of the claimed invention. See, e.g.,
14 Therasense, Inc. v. Becton, Dickinson and Co., 593 F.3d 1325, 1332 (Fed. Cir. 2010).
15 Moreover, “[t]he way in which the elements are arranged or combined in the claim must
16 itself be disclosed, either expressly or inherently, in an anticipatory reference.” Id.; see also
17 Net MoneyIN, 545 F.3d at 1369.

18 Thus, while priority of invention is a question of law, it must be determined based on
19 underlying factual determinations. See, e.g., ActiveVideo Networks, Inc. v. Verizon
20 Commc’ns, Inc., 694 F.3d 1312, 1327 (Fed. Cir. 2012); Amkor Tech., Inc. v. Int’l Trade
21 Comm’n, 692 F.3d 1250, 1254 (Fed. Cir. 2012).

22 Here, Sony argues that the autoplay without rebooting feature of Windows 95 (sold
23 in August 1995) was developed by three Microsoft employees no later than January 31,
24 1994 (five months before the filing of the ‘492 patent application), and was fully operational
25 and checked into Microsoft’s software management system by that date. In support, Sony
26 attaches as Exhibits 92 and 93 to the Declaration of Fahd Majiduddin two “summary charts”
27 prepared by its attorneys. Sony contends that these charts “confirm” TVI’s prior allegations
28 from the Microsoft case that Windows 95 included each feature of the asserted patent

1 claims and that Microsoft reduced those features to practice by January 31, 1994.

2 Sony asserts that to swear behind the January 31, 1994 reduction-to-practice date
3 of Windows 95, TVI must show an earlier conception date of all claim elements, and must
4 show diligence from prior to January 31, 1994 – neither of which TVI can do.

5 First, Sony contends that TVI has produced no corroborated evidence of prior
6 conception of “without rebooting.” Sony asserts that the claim element of “without
7 rebooting” does not appear in any TVI/Redford documents prior to the July 1, 1994 filing
8 date of the original application for the TVI patents. And, Sony argues, even if TVI could
9 show that there was earlier conception of the “without rebooting” feature prior to January
10 31, 1994, Mr. Redford admitted that TVI’s patent attorneys were not diligent until Omkar
11 Suryadevara (who drafted and filed the patent application and was the only attorney to
12 work on the DISGO application) “took over” on March 16, 1994 – which was after January
13 31, 1994.

14 Sony concedes that Judge White denied Microsoft’s motion for summary judgment
15 of invalidity as to Windows 95, on the basis that there were facts in dispute regarding the
16 timing of TVI’s reduction to practice, as well as conception and diligence. However, Sony
17 argues, since that time, new facts have come to light and now, no reasonable dispute can
18 exist. In particular, Sony contends that TVI is precluded from establishing an invention date
19 prior to March 16, 1994, as Mr. Redford admits it was not until that date that TVI’s patent
20 counsel Mr. Suryadevara became involved.

21 In opposition, TVI argues that Sony failed to cite any real evidence in its two-page
22 attempt to prove Microsoft’s prior invention, as the two summary exhibits (Sony’s Exhibits
23 90 and 93) are simply compilations of attorney argument prepared for litigation, and are
24 therefore not evidence.

25 As a further basis for denying the motion, TVI argues that Sony has not established
26 anticipation by “prior invention” and has not offered the “prior invention” into evidence. TVI
27 contends that Sony has no proof of any single prior art invention – it did not produce any
28 such reference during discovery, and did not attach any such reference to its motion.

1 Rather, TVI asserts, Sony simply attached numerous exhibits which it attempted to “tape
2 together” as a prior invention, which does not satisfy the standard, and which in addition is
3 not sufficiently described as to date. Moreover, TVI argues, its own expert testified that he
4 reviewed the native files produced by Sony and discovered no prior invention because
5 Sony has not produced sufficient information to teach one of ordinary skill in the art how the
6 produced files operate.

7 Finally, TVI contends that Sony has no evidence that the commercial version of
8 Windows 95 (which was commercially released on August 24, 1995) is what Sony claims
9 Microsoft reduced to practice in January 1994 – the undisclosed “build-up” version, which
10 Sony has in any event not even offered into evidence here. In addition, TVI asserts it has
11 evidence that Microsoft modified the “autoplay” software files in October 1994 – more than
12 three months after TVI filed its initial patent application – and that it also modified other files
13 after that date.

14 In its second main argument TVI asserts that Sony’s arguments about the dates of
15 conception and reduction to practice are not supported by any evidence, and that there is
16 at least a dispute of fact as to those dates.

17 The court finds that Sony has failed to meet its burden of showing by clear and
18 convincing evidence that the patents-in-suit are invalid under § 102(g). As for the
19 “summary exhibits,” they are attorney argument, not evidence. The court finds further that
20 factual disputes exist with regard to, e.g., when Windows 95 was reduced to practice; and
21 that Sony has not established that all four corners of the Windows 95 invention describe
22 every element of TVI’s claimed invention.

23 b. Invalidity under § 103

24 Under 35 U.S.C. § 103,

25 a patent may not be obtained though the invention is not identically disclosed
26 or described as set forth in section 102, if the differences between the subject
27 matter sought to be patented and the prior art are such that the subject matter
as a whole would have been obvious at the time the invention was made to a
person having ordinary skill in the art to which subject matter pertains.

28 35 U.S.C. § 103(a).

1 Obviousness is a question of law, to be determined based on underlying factual
2 determinations. Santarus, Inc. v. Par Pharm., Inc., 694 F.3d 1344, 1351 (Fed. Cir. 2012).
3 A challenger claiming invalidity of a patent due to obviousness must prove by clear and
4 convincing evidence that the claimed subject matter “as a whole would have been obvious
5 at the time the invention was made” to those skilled in the art. K-Tec, Inc. v. Vita-Mix
6 Corp., 696 F.3d 1364, 1378 (Fed. Cir. 2012).

7 Under § 103, the scope and content of the prior art are to be determined;
8 differences between the prior art and the claims at issue are to be
9 ascertained; and the level of ordinary skill in the pertinent art resolved.
10 Against this background, the obviousness or nonobviousness of the subject
11 matter is determined. Such secondary considerations as commercial success,
12 long felt but unsolved needs, failure of others, etc., might be utilized to give
13 light to the circumstances surrounding the origin of the subject matter sought
14 to be patented.

15 KSR Int’l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007) (citation and quotation omitted).

16 “While the sequence of these questions might be reordered in any particular case, the
17 factors continue to define the inquiry that controls. If a court, or patent examiner, conducts
18 this analysis and concludes the claimed subject matter was obvious, the claim is invalid
19 under § 103.” Id. at 407.

20 The underlying factual inquiries that the court may consider are (1) the scope and
21 content of the prior art; (2) the differences between the prior art and the claims at issue;
22 (3) the level of ordinary skill in the field of the invention; and (4) objective considerations
23 (also referred to as “secondary considerations”) such as commercial success, long felt
24 need, and the failure of others. See Santarus, 694 F.3d at 1351.

25 Here, Sony argues that the asserted claims are invalid as obvious based on 3DO or
26 CDTV, in combination with the “CD-I Designer’s Overview.”⁵ Sony claims that the 3DO and
27 CD-I were both multimedia players that performed autoplay, and that the 3DO combined

28 ⁵ Sony asserts that its expert Dr. Bruno “described the CD-I player and related
publications in detail in his expert report,” which Sony attaches as Exhibit 89 to the Majiduddin
Declaration. According to Sony, Dr. Bruno “led the CD-I development team at Philips in the
1980s and early 1990s, and published a book entitled ‘Compact Disc-Interactive, A Designer’s
Overview’ describing the CD-I player and its specification” (referred to here as the CD-I
“Designer’s Overview” or “DO”).

1 with “CD-I Designer’s Overview” or “CD-I DO” renders obvious all of the asserted claims.

2 Sony contends that the 3DO, the CD-I DO, and the host devices in the TVI patents
3 all include a host device coupled to a CD drive; and also play video content from discs
4 inserted into the CD drive, and automatically start applications upon insertion of the disc.
5 Sony claims that the decision to reboot or not between autoplaying discs was at the time of
6 the TVI invention, merely a “design choice,” and that the CD-I DO expressly taught that
7 either was possible.

8 Citing to particular pages from the CD-I DO (text and diagram), Sony argues that the
9 DO teaches the obvious design choice of autoplaying with or without rebooting. Sony
10 asserts that the DO shows that the CD-I device returns to the point indicated in the
11 diagram, located just above the step “Load Boot file (if present on disc),” when a user
12 inserts a new disc – that after booting up and executing an application on a disc, the
13 system continues to detect insertions of newly inserted discs and the system will not reboot
14 (unless there happens to be a boot file on the disc). According to Sony’s interpretation, the
15 CD-I DO discloses continuing to detect insertion without rebooting, and also continuing to
16 detect insertion with rebooting the device (for a special case of the disc having a boot file),
17 both of which Sony claims are available design choices to the producer of the CD-I disc.

18 Sony argues further that the CDTV in conjunction with the CD-I DO renders all
19 asserted claims invalid as obvious under 35 U.S.C. § 103. Sony asserts that TVI claims
20 that CDTV does not anticipate because it lacks a “file having a predetermined name” since
21 the Disc Label file is always at a predetermined location on a CD-I disc. Sony disagrees
22 with this contention, but asserts that the combined teachings of CDTV and the CD-I DO
23 nevertheless render all TVI’s claims obvious.

24 In the Microsoft case, Microsoft filed a motion for summary judgment of invalidity of
25 all claims of TVI’s patents as anticipated by CDTV. According to Sony, in its opposition,
26 TVI argued that CDTV rebooted or re-initialized the CDTV player, and then, according to
27 Sony, TVI “convinced Judge White” that “after the claimed invention initially loads the
28 initialization files, it can then detect every ensuing insertion of media without re-initializing

1 the system.” Sony claims that the “without rebooting” limitation was the only feature that
2 Judge White found to be missing from CDTV.

3 Sony also contends that in the reexamination that was initiated by Microsoft’s
4 request following the settlement of the Microsoft case, the PTO initially rejected claims as
5 anticipated and/or obvious over the CDTV prior art, and that TVI then amended the claims
6 to include the “without rebooting” on disc insertion limitation, after which the PTO allowed
7 the claims based on TVI’s amendments and arguments that CDTV rebooted upon each
8 disc insertion and ejection.

9 Sony claims that after the PTO received Microsoft’s reexam request, the PTO
10 determined that there was a substantial question regarding the patentability of all “identified
11 claims.” According to Sony, TVI then informed the ‘307 patent examiner that another
12 examiner on the ‘532 patent had allowed claims on the ‘532 patent after those claims were
13 amended to incorporate the “without rebooting” limitation, and stated that “the common
14 issue presented by all the reexamination requests and the art cited therein is whether the
15 claims on the reexamination are valid over ‘boot art’ disclosed by the CDTV manual.”

16 Sony contends that in the subsequent Office Action letter, the examiner provided a
17 detailed claim chart demonstrating that every element of the ‘307 claims was present in the
18 CDTV Manual. According to Sony, TVI responded by adding the “without rebooting the
19 host device” limitation, and the examiner at that point allowed the claims. Sony claims that
20 in the other reexam proceedings, TVI conceded that the “normal functions” of CDTV
21 included “the steps of automatically enabling and interrupt, automatically checking for a file
22 other than the initialization file on occurrence of the interrupt, automatically loading,
23 automatically executing and returning to such step of automatically enabling.” Sony asserts
24 that when the '307 Examiner subsequently allowed the claims of the '307 Patent, his
25 "reasons for patentability" relied on CDTV's alleged inability to perform the claimed steps
26 without rebooting.

27 According to Sony, at no time during the original or reexam prosecution did TVI or
28 the examiners ever consider prior art that was understood to disclose autoplay upon disc

1 insertion without rebooting the device. However, Sony contends, the CD-I DO indisputably
2 teaches this feature, and the CDTV and CD-I prior art references are in the same field
3 (multimedia host devices) and when considered together provide a combination of familiar
4 elements according to known methods that yield predictable results. For this reason, Sony
5 argues, TVI's asserted patent claims are invalid as obvious over the combination of CDTV
6 and CD-I DO because the only alleged missing feature from CDTV was "without rebooting"
7 and CD-I DO clearly teaches that feature for use in the same device.

8 In opposition, TVI asserts that Sony has failed to meet its high burden of establishing
9 obviousness. TVI argues that the court should deny Sony's motion because Sony has
10 failed to properly support its argument with admissible evidence, and because there are
11 fact questions as to whether the combinations identified by Sony render the asserted
12 claims obvious.

13 The court finds that the motion must be DENIED. First, Sony has failed to meet its
14 burden of showing invalidity by clear and convincing evidence, and in particular, has failed
15 to support its arguments with admissible evidence. As with the portion of the motion
16 regarding Microsoft's purported prior invention, Sony cites not to actual evidence, but rather
17 to attorney-created cut-and-paste excerpts of documents and expert reports, along with
18 attorney comments in various charts prepared by counsel.

19 More notably, Sony has failed to provide supporting expert opinion, leaving it to the
20 court to try to interpret and evaluate technologically complex documents and arguments.
21 While Sony argues that where the references and the invention are "easily
22 understandable," there is no "need" for expert testimony for the court to find invalidity on
23 summary judgment, the fact is that the court finds neither the references and the invention
24 nor Sony's arguments to be easily understandable as presented.

25 The court also finds that summary judgment is not warranted based on the existence
26 of factual questions as to whether the combinations identified by Sony render the asserted
27 claims obvious. Sony failed to make even a prima facie showing that its purported 3DO
28 and CD-I DO combination, or purported CDTV and CD-I DO combination, each has all the

1 claim limitations of all the fifteen asserted claims. Moreover, Sony has neither addressed
2 TVI's evidence of "secondary considerations" of non-obviousness, such as evidence of
3 commercial success and market acceptance, and failure of others; nor put forth any
4 contrary evidence regarding "secondary considerations" as required by the standard.

5 c. Invalidity under § 102(a) and/or § 103

6 Sony asserts the asserted claims are invalid either as anticipated under § 102(a)
7 (priority of invention) or as obvious under § 103, in light of certain prior art. Both
8 anticipation and obviousness require the court to compare the properly construed claims to
9 the available prior art. Genetics Inst. LLC v. Novartis Vaccines and Diagnostics, Inc., 655
10 F.3d 1291, 1302 (Fed. Cir. 2011). However, obviousness can be proven by combining all
11 existing prior art references, while anticipation requires that all elements of a claim be
12 disclosed within a single reference. Cohesive Techs., Inc. v. Waters Corp., 543 F.3d 1351,
13 1364 (Fed. Cir. 2008).

14 That is, if each and every limitation is found either expressly or inherently in a single
15 prior art reference, the claim is invalid under § 102 for anticipation. Genetics Inst., 655
16 F.3d at 1302. If it is necessary to reach beyond the boundaries of a single reference to
17 provide missing disclosure of the claimed invention, the proper ground is not § 102
18 anticipation, but § 103 obviousness. Cohesive Techs., 543 F.3d at 1364. However, proof
19 of inherent anticipation is not the same as proof of obviousness, and it does not follow that
20 every technically anticipated invention would also have been obvious. Id. Moreover,
21 obviousness requires analysis of the underlying facts, including the scope and content of
22 the prior art, the level of ordinary skill in the art, the differences between the claimed
23 invention and the prior art, and the "secondary considerations," while secondary
24 considerations are not part of a claim of anticipation. Id.

25 Sony argues that a Japanese patent application filed by NEC in 1992 ("JP '155") and
26 published in October 1993, invalidates the claims under § 102(a) and/or § 103 in view of
27 UNIX publications. According to Sony, JP '155 proves that Redford was not the first to
28 invent autoplay from inserted media based on predetermined file names without rebooting.

1 According to Sony, JP '155 discloses a system that checks for and executes a file
2 called "autoexec" on a disk to spare the user from typing commands. It is the disk drive (JP
3 '155, Fig.2) and flowchart of operation (JP '155, Fig. 3) that Sony claims are shown with
4 English translations in its brief. According to this English translation, the drive 10 has a slot
5 15 for floppy disks, button 17 to eject disks, and a light 16 to indicate whether a disk is in
6 the drive. The drive has an auto-start mode to automatically start applications upon disk
7 insertion. Each press of button 18 toggles the auto-start mode, i.e., turning the mode on
8 (indicator light 19 lit up) or off (indicator light 19 turned off).

9 Sony claims that JP '155 solved the same problems that TVI purported to solve such
10 as avoiding the need to "learn . . . input commands to execute the application program" or
11 to be "proficient in UNIX command operations" (citing JP '155 at 5). Sony asserts that
12 "[w]hen there is a design need or market pressure to solve a problem," the pursuit of known
13 options "is likely the product not of innovation but of ordinary skill and common sense."
14 KSR, 550 U.S. at 421.

15 Sony also attaches as Exhibit 105 to the Majiduddin Declaration a 31-page "JP '155
16 invalidity chart." Based on this (attorney-prepared) chart, Sony asserts that there is no
17 genuine issue of material fact that JP '155 discloses the same obvious techniques claimed
18 in the TVI Patents. Sony claims that JP '155 uses the example of a UNIX workstation, and
19 that when a floppy disc is inserted, the disk drive sends an interrupt signal to the operating
20 system (OS) which proceeds to "mount" the disc.

21 Sony asserts that the system will "check the content on the floppy disk 8" and use a
22 "find command" to check whether the disk includes "the predetermined file named
23 'autoexec.'" Sony claims that TVI's expert Dr. Wolfe has admitted that "JP '155 describes
24 'autoexec as one exemplary name of a file on a disk," and argues that if the autoexec file is
25 found, the commands in the file are executed. Sony asserts that this process of detecting
26 insertion and finding and executing the autoexec file occurs without rebooting – and that as
27 discs are ejected and new discs inserted, JP '155 executes one "automatic execution
28 command file 9 after another," and "[e]ven after the automatic start specific switch 18 is

1 pressed, the floppy disk 8 may be inserted and ejected as desired” (citing JP ‘155).

2 Sony claims that Fig. 3 of JP ‘155 shows that the system returns directly to the disc
3 insertion step (S2) after the program is run (S7), and that step S10 (shutdown) confirms
4 that JP ‘155 does not reboot through steps S7 to S2. According to Sony, when JP ‘155
5 reboots or shuts down, it is shown at step S10. Sony asserts that JP ‘155 also expressly
6 refers to continuously starting one autoexec file after another when each disk is replaced:

7 In addition, if the content in a single floppy disk 8 is insufficient for the
8 processing, a plurality of floppy disks 8 may be successively inserted to start
9 one automatic execution command file 9 after another, resulting in continuous
10 processing. In this case, the floppy disk 8 is replaced by another disk while
11 the automatic program start mode indicator lamp 19 is in an on-state. The
above procedure makes it possible to automatically perform the operation
from the installation to execution of the application program 30 without
performing an operation that requires the knowledge about the UNIX 20 such
as command input through the keyboard.

12 JP ‘155 at 13.

13 Sony states that it expects that TVI will argue JP ‘155 does not include initialization
14 files – to which Sony’s response is that such files are inherently disclosed since JP ‘155
15 teaches connecting the disk drive to a UNIX system, and UNIX computers prior to 1993
16 included initialization files used at boot-up to configure hardware and are not used
17 thereafter. Sony contends that even TVI’s expert Dr. Wolfe agrees that UNIX computers
18 had initialization files, and further, as indicated in “UNIX Internals – A System Operations
19 Handbook,” there is “no question” that UNIX systems used such initialization files.

20 In opposition, TVI argues that the motion should be denied because Sony has not
21 established that any of the fifteen asserted claims is invalid based on JP ‘155. As an initial
22 matter, TVI argues that Sony has again provided no evidence to support its argument, and
23 that it has provided its analysis regarding the fifteen claims in a separate attorney-created
24 document. TVI asserts further that even if Sony had properly supported its arguments
25 regarding the JP ‘155 reference, it has not established that any asserted claim is invalid
26 based on that reference.

27 In addition, TVI contends that summary judgment of anticipation is inappropriate
28 here in light of JP ‘155 alone, or in combination with UNIX publications, because there are

1 fact issues regarding whether every limitation of every claim of the asserted patents is
2 found in JP ‘155, and because Sony has not shown that the JP ‘155 reference describes
3 every limitation arranged or combined in the same way as the asserted claims, or that any
4 particular version of UNIX rendered TVI’s patents obvious.

5 The court finds that the motion must be DENIED. Sony has failed to meet its burden
6 of showing by clear and convincing evidence that the asserted claims are invalid as
7 anticipated or obvious based on the JP ‘155 prior art or on UNIX. The claim charts and
8 other attorney-prepared exhibits are not evidence, and are therefore insufficient to support
9 a motion for summary judgment. In addition, other materials cited by Sony – such as the
10 UNIX manual – are incomprehensible to the court without the assistance of expert
11 testimony.

12 Moreover, it appears that a genuine issue of material fact exists with regard to, e.g.,
13 the element requiring checking for a file of predetermined name, and whether JP ‘155
14 requires that the host check each disc for a “predetermined name;” and with regard to
15 whether JP ‘155 does or does not disclose an initialization file, or whether it discloses
16 “automatically displaying a selection encoded in the form of electronic content on said
17 removal storage media.”

18 B. The Cross-Motions for Summary Judgment

19 TVI and Sony each seek summary judgment as to Sony’s counterclaim/affirmative
20 defense of inequitable conduct, and affirmative defense of laches. In addition, TVI seeks
21 summary judgment as to Sony’s affirmative defense of equitable estoppel, and Sony seeks
22 summary judgment as to its counterclaim/affirmative defense of noninfringement.

23 1. Inequitable conduct

24 In its answer and counterclaim, Sony alleges that the patents-in-suit are
25 unenforceable based on inequitable conduct by TVI, Mr. Redford, Mr. Stern, “and others”
26 involved in the prosecution and reexamination of the patents. “Applicants for patents are
27 required to prosecute patent applications in the PTO with candor, good faith, and honesty.”
28 Molins PLC v. Textron, Inc., 48 F.3d 1172, 1178 (Fed. Cir. 1995). “A breach of this duty

1 constitutes inequitable conduct.” Id. If the conduct was sufficiently culpable, a court may
2 declare the patent to be unenforceable. Id.; see also Massachusetts Eye and Ear Infirmary
3 v. QLT Phototherapeutics, Inc., 412 F.3d 215, 237 n.12 (Fed. Cir. 2005).

4 To establish unenforceability based on inequitable conduct in the PTO, the alleged
5 infringer must show that information material to patentability was withheld from the PTO, or
6 material misinformation was provided to the PTO, with the intent to deceive or mislead the
7 patent examiner into granting the patent. Therasense, Inc. v. Becton, Dickinson & Co., 649
8 F.3d 1276, 1290-92 (Fed. Cir. 2011) (en banc); see also Outside the Box Innovations, LLC
9 v. Travel Caddy, Inc., 695 F.3d 1285, 1290 (Fed. Cir. 2012). “[I]nequitable conduct hinges
10 on basic fairness,” and should, as a general rule, be applied only in instances “where the
11 patentee’s misconduct resulted in the unfair benefit of receiving an unwarranted claim.”
12 Therasense, 649 F.3d at 1292 (citation omitted).

13 Intent and materiality are separate requirements, and both must be established. Id.
14 at 1290. A finding that the misrepresentation or omission amounted to negligence or even
15 gross negligence under a “should have known” standard does not satisfy the intent
16 requirement. Id.; see also 1st Media, LLC v. Electronic Arts, Inc., 694 F.3d 1367, 1374-75
17 (Fed. Cir. 2012) (knowledge of the reference and knowledge of materiality alone are
18 insufficient to show an intent to deceive). Anything else would “effectively eviscerate
19 Therasense’s test for mens rea and reinflct the plague of patent unenforceability based on
20 the thinnest of speculation regarding the applicant’s putative mental state.” 1st Media, 694
21 F.3d at 1374.

22 Because direct evidence of deceptive intent is rare, the court “may infer intent from
23 indirect and circumstantial evidence.” Therasense, 649 F.3d at 1290. “However, to meet
24 the clear and convincing evidence standard, the specific intent to deceive must be ‘the
25 single most reasonable inference able to be drawn from the evidence[,]’” and “the evidence
26 ‘must be sufficient to require a finding of deceitful intent in the light of all the
27 circumstances.’” Id. (citations omitted). If multiple reasonable inferences can be drawn,
28 “intent to deceive cannot be found.” Id. at 1290-91.

1 In addition, “[b]ecause neither mere nondisclosure of prior art references to the PTO
2 nor failure to mention prior art references in an affidavit constitutes affirmative egregious
3 misconduct, claims of inequitable conduct that are based on such omissions require proof
4 of but-for materiality.” Id. at 1292-93. An exception to this rule is that it is not necessary to
5 prove “but-for” materiality where the alleged inequitable conduct can be considered
6 “affirmative egregious misconduct.” Id. at 1292.

7 Here, Sony argues that TVI’s patents are unenforceable due to inequitable conduct,
8 claiming that the inventors, Mr. Redford and Mr. Stern, were fully aware of the 3DO, CDTV,
9 and CD-1 prior art products that implemented “autoplay” and that anticipated their
10 inventions, but withheld that information in order to mislead the PTO.⁶ For its part, TVI
11 contends that Sony cannot prove by clear and convincing evidence that 3DO or CDTV
12 provide a basis for affirmatively finding inequitable conduct, and that the motion must be
13 denied as to CD-1 because the court denied Sony’s motion to amend the answer and
14 counterclaims to allege CD-1 as a basis for the inequitable conduct affirmative defense and
15 counterclaim.

16 Sony argues that Mr. Redford had extensive knowledge of 3DO and the 3DO game
17 console as early as 1993 and 1994; and that TVI business records confirm his knowledge
18 of 3DO and its materiality during the prosecution of the TVI patents. Sony contends that
19 Mr. Redford made a deliberate decision to withhold the 3DO reference during prosecution
20 and to misrepresent its operation as excluding autoplay in the patents. Sony also asserts
21 that Mr. Redford and his “prosecution team” continued to misrepresent 3DO to the PTO
22 during reexamination, by, for example, failing to submit certain documents from the
23 Microsoft litigation which Sony contends were necessary to correct statements in the
24 specification that 3DO did not implement autoplay, despite the fact that Mr. Redford had
25 been indisputably “told” during that lawsuit that the 3DO player did implement autoplay.

27 ⁶ For the most part, Sony limits its argument in the present motion to the allegations
28 against Mr. Redford, asserting that it was unable to locate Mr. Stern during discovery in this
case.

1 Sony contends that Mr. Redford and Mr. Stern were “privity to intimate knowledge of
2 the operation of 3DO in 1993-94” when TVI entered a “business relationship” with 3DO and
3 tried to obtain certification for a remote control for the 3DO player. Sony claims that
4 “numerous documents” involving Redford and authenticated by him discuss meetings
5 regarding the 3DO player, as well as TVI’s “extensive business relationship” with 3DO.

6 Sony cites to evidence showing that Redford prepared several business plans in
7 1993 that “refer to” the 3DO player, and that he “described” the 3DO player to TVI’s board
8 in June 1994, two weeks before filing the initial patent application on July 1, 1994.
9 Moreover, Sony asserts, in February 1996, while the first two patent applications were
10 pending, Redford compiled a book called “Video on Demand for Interactive Television
11 Featuring TVIQ Technology,” which Sony claims discusses 3DO, CD-I, Sony’s PlayStation,
12 and Sony’s (at that time) new DVD standard, in the context of TVI’s “TVIQ” product and its
13 core component “DISGO” (Redford’s autoplay invention). Sony argues that this book
14 “establishes” that Redford knew of the 3DO player, and that he knew it was “highly material
15 as regards autoplay,” and that he “made a deliberate decision to withhold it and to
16 misrepresent its operation as excluding autoplay.”

17 Sony also asserts that it has “learned” that TVI entered into an NDA with 3DO in
18 February 1994 to receive 3DO’s “proprietary information” and asserts that 3DO’s former
19 GC stated that 3DO would “typically have disclosed substantial amounts of information to
20 any business partner who executed an NDA.” However, Sony argues, because TVI no
21 longer has any of this information, and because 3DO went bankrupt and its former general
22 counsel allegedly no longer has access to 3DO’s files, Sony has no proof of these claims.

23 With regard to CDTV, Sony first contends that the court should reject any argument
24 by TVI that is based on the premise that the original claims should be limited to autoplay
25 without rebooting. Sony argues that such a “construction” is contrary to the express
26 language of the original claims; that the PTO rejected that construction during
27 reexamination when it rejected certain claims in TVI’s patents as anticipated by CDTV; that
28 TVI consistently represented that its patents covered the broad concept of autoplay until

1 late in the Microsoft litigation after Microsoft allegedly demonstrated how CDTV invalidated
2 all claims (and TVI then argued that its claims should be limited to systems that autoplay
3 without rebooting); and that admissions made by Mr. Redford and TVI's expert Dr. Wolfe
4 establish that autoplay "was believed" to be the most important aspect of the invention.

5 Sony contends that the evidence shows that Mr. Redford withheld the CDTV prior art
6 during the original prosecution, and during reexamination, with an intent to deceive the
7 PTO. Sony notes that the CDTV player – which it claims implemented autoplay the same
8 way TVI did – was first sold in the United States in April 1991. Sony asserts that Judge
9 White made an incorrect decision in holding that the CDTV did not anticipate claims in view
10 of TVI's allegation that the claims should be considered to include what Sony asserts was
11 an unclaimed "without booting" limitation. Nevertheless, Sony argues, this "error" need not
12 be considered in view of the fact that the "high materiality" of CDTV was established during
13 the PTO reexam.

14 Sony asserts that in its request for reexamination of the patents, Microsoft relied on
15 the CDTV manual as prior art, and the PTO issued three office actions rejecting numerous
16 claims as invalid base on the CDTV manual. Sony claims that in response, Mr. Redford's
17 counsel "repeatedly made false statements" regarding how CDTV operated – e.g., that the
18 CDTV device rebooted upon insertion of a disc, and upon ejection, which Sony claims was
19 false because the CDTV does not reboot upon disk insertion. Sony claims it is not
20 providing this information in order to prove Mr. Redford's inequitable conduct, but only to
21 show that CDTV was not properly considered by the PTO during the reexams.

22 Sony claims that because the examiner rejected claims in each of the four TVI
23 patents based on the CDTV Manual, "but-for" materiality has been established. According
24 to Sony, the only issue that remains is whether Mr. Redford knew of CDTV, knew it was
25 material, and made a deliberate decision to withhold it. Sony argues that because the
26 evidence shows that Mr. Redford was aware of CDTV, had seen it in operation, had
27 authored a business plan identifying CDTV as the main competing commercial technology
28 in 1991, and had documents disclosing its technical features – yet failed to disclose any of

1 this information including the technical documents to the PTO – the “pattern of deception
2 and deceit is clear” and there are no disputed issues of material fact.

3 Sony claims that Mr. Redford was asked how he could have appreciated these
4 supposedly detailed distinctions from simply observing the CDTV in action, and that he
5 then “admitted that he had obtained and used documents about the CDTV product,
6 including a customer brochure and articles in computer magazines[,]” and that he never
7 provided copies of these documents to the PTO. Sony argues that since Mr. Redford
8 “admitted” he did not disclose these documents, this shows that he “made a deliberate
9 decision” to withhold the information from the PTO, which demonstrates intent.

10 Sony also contends that because the PTO rejected certain claims in each patent
11 during the reexam over CDTV, “but-for” materiality is established. And since, in Sony’s
12 view, it has established that Mr. Redford knew of the CDTV technology, knew it was
13 material, and deliberately withheld it, this is all that is necessary to establish inequitable
14 conduct.

15 Finally, Sony argues that Judge White’s denial of Microsoft’s motion for summary
16 judgment based on CDTV is of no relevance because as of that time, the PTO had not yet
17 rejected any claims based on CDTV. Nevertheless, Sony asserts, notwithstanding his
18 denial of Microsoft’s motion, Judge White was “concerned with Redford’s withholding of
19 CDTV,” as he stated in the order granting Microsoft’s motion for leave to amend the
20 pleadings and preliminary invalidity contentions that “Microsoft may be successful on its
21 defense/counterclaim of inequitable conduct based on the CDTV reference” in view of the
22 October 1991 business plan “which clearly shows that Redford was familiar with the CDTV
23 reference.” Sony also notes that Judge White denied TVI’s motion for a finding of no
24 inequitable conduct on the basis that disputed facts existed regarding Redford’s failure to
25 disclose the 3DO system comprehensively or to disclose Commodore’s CDTV as prior art.

26 With regard to the CD-I player, Sony contends that this product was jointly
27 developed by Sony and Philips in the 1980s, and that Mr. Redford admitted that he owned
28 a CD-I player in 1991, and his October 1991 business plan referred to the CD-I player as

1 having a standard that “will likely carve out a significant segment of the multimedia market.”
2 Sony also claims that Mr. Stern “reached out to Philips” seeking to obtain a copy of the CD-
3 I standard and other CD specs, to which he received a response advising him that the
4 material he sought was available for purchase, and that he subsequently submitted this
5 information to TVI. Based on this, Sony asserts that the undisputed facts establish that Mr.
6 Redford knew about the CD-I prior art, knew it was material, and made a deliberate
7 decision to withhold it from the PTO.

8 TVI argues that Sony’s allegations about 3DO pertain to TVI’s disclosures to the
9 PTO, and Sony’s claim that TVI was wrong about 3DO and its toggling requirement. TVI
10 asserts that this is simply an allegation, not proof. TVI also argues that the specification
11 correctly described 3DO as Mr. Redford understood it during prosecution – or at least as
12 Mr. Redford understood the developer’s prototype – and there is no evidence to the
13 contrary.

14 Nor, TVI asserts, can Sony prove that 3DO was “but-for” material to any asserted
15 claim in the patents. TVI contends that Sony’s experts rely on information outside the 3DO
16 player itself, including highly confidential information such as source code, which Mr.
17 Redford did not and does not have access to. TVI also contends that the PTO has
18 disagreed with Sony’s experts over the materiality of 3DO – as the PTO has already
19 determined that 3DO is not but-for material.

20 TVI notes that Sony’s position here is the materiality of 3DO and other products
21 would be “clear to one of ordinary skill in the art and even to a lay person,” based on such
22 person’s viewing of videos that show the operation of the products. TVI argues, however,
23 that arguments of counsel cannot meet the burden of proof on summary judgment. Apart
24 from this, TVI argues that Sony has not established that Mr. Redford knew about or
25 appreciated the alleged materiality of 3DO, and that Sony has no evidence of deceptive
26 intent.

27 With regard to CDTV, TVI asserts that Sony has offered no evidence of deceptive
28 intent, in particular because it has failed to establish that Mr. Redford knew of, or

1 appreciated the alleged materiality of, CDTV’s limited autoplay capacity. TVI contends that
2 the only evidence in the record is that Mr. Redford saw a CDTV device running in an
3 electronics store, was intrigued by its unique remote control, and then saw other high-level
4 brochures and advertisements about CDTV (none of which identified autoplay as a
5 feature). TVI contends that Sony appears to be arguing that Mr. Redford “should have
6 known” – which the Federal Circuit has unambiguously held is insufficient to establish the
7 “intent” requirement.

8 In addition, TVI contends that Sony cannot prove that CDTV is “but-for” material,
9 because the PTO has already confirmed the validity of the asserted patents over CDTV –
10 which means that Sony has no “clear and convincing” evidence that the issued patents
11 would not have been issued “but-for” the omission of the CDTV reference.

12 Finally, TVI notes that the CDTV manual was at issue during reexamination, while
13 Sony has alleged that it was the CDTV device that forms the basis of its inequitable
14 conduct allegations. TVI argues that Sony’s purported proof of materiality of a non-
15 accused reference is irrelevant to whether the CDTV device is material, and that even if
16 Sony’s proof of materiality is based on the CDTV manual, there is no evidence or even
17 allegation that Mr. Redford knew of the CDTV manual.

18 Finally, with regard to CD-I, TVI asserts that Sony cannot prove its unpled
19 allegations regarding CD-I. Sony previously sought leave to amend its answer and
20 counterclaims to assert an affirmative defense and counterclaim of inequitable conduct as
21 to the CD-I reference, but the court denied the motion as untimely. Thus, there is no
22 inequitable conduct affirmative defense that relates to CD-I.

23 The court finds that both motions must be DENIED. Sony has not met its burden of
24 proving inequitable conduct, because it has not proven that TVI or Redford made a
25 deliberate decision to withhold information from the PTO, and has also not proven that
26 either the 3DO player or the CDTV console is material, or that anyone at TVI appreciated
27 Sony’s theory of materiality. Nor has Sony identified any basis for the court to find an
28 egregious affirmative act. Sony does not claim that TVI or Mr. Redford filed a false

1 affidavit, which is the sole type of “egregious affirmative act” identified by the Federal Circuit
2 as providing an exception to the requirement of “but-for” materiality. See Therasense, 649
3 F.3d at 1292. On the other hand, the evidence provided by Sony, while insufficient to prove
4 inequitable conduct, is arguably sufficient to raise disputed issues of fact as to this defense.

5 With regard to the 3DO device, Sony failed to provide admissible evidence that
6 clearly establishes that TVI withheld references that were material to patentability.
7 Primarily, Sony relies on an exhibit that is an attorney-prepared chart or summary
8 combining numerous 3DO and CD-I references. An attorney-prepared summary is not
9 admissible evidence, and in any event, this exhibit is a “collage” of at least 10 separate
10 references about 3DO.

11 Nor has Sony provided clear and convincing evidence showing that Mr. Redford or
12 Mr. Stern appreciated the alleged materiality of the 3DO device. To sustain a charge of
13 inequitable conduct, “clear and convincing evidence must show that the applicant made a
14 deliberate decision to withhold a known material reference.” Molins, 48 F.3d at 1181. Even
15 were the court to assume for the sake of argument that Mr. Redford or Mr. Stern
16 appreciated the materiality of the 3DO reference, an applicant’s appreciation of the alleged
17 materiality of a reference is a separate and distinct element of proof from separate intent.
18 See 1st Media, 694 F.3d at 1374-75. Here, however, it is unclear whether Mr. Redford or
19 Mr. Stern even saw the numerous references that are incorporated in Sony’s theory of
20 materiality, let alone that they acted with the specific intent to deceive the PTO.

21 With regard to the CDTV device, Sony has provided no evidence showing that the
22 CDTV console is material, and that the PTO non-final rejection of claims cited by Sony was
23 based on the CDTV manual, not the device itself; or that Mr. Redford or Mr. Stern
24 appreciated the alleged materiality of the CDTV console. The manual is a 480-page
25 document, and even if Mr. Redford was aware of the manual, it is not clearly established
26 that he knew of every single thing in the manual. Moreover, even if the CDTV manual
27 could be considered a material reference, it does not necessarily follow that the CDTV
28 console is material.

1 With regard to the CD-I reference, Sony concedes that this issue is moot, as there is
2 no inequitable conduct defense or counterclaim pled with respect to the CD-I prior art.

3 2. Laches

4 In its answer and counterclaim, Sony alleges that the doctrine of laches bars TVI
5 from recovering any compensation or remedy for the alleged infringement of the patents-in-
6 suit by the Sony defendants. Laches is cognizable under 35 U.S.C. § 282 as an equitable
7 defense to a claim for patent infringement. A.C. Aukerman Co. v. R.L. Chaides Const. Co.,
8 960 F.2d 1020, 1028-30 (Fed. Cir. 1992).

9 The alleged infringer bears the burden of proving two elements by a preponderance
10 of evidence – that the patentee delayed filing suit for an unreasonable and inexcusable
11 length of time from the time the patentee knew or reasonably should have known of its
12 claim against the defendant, and that the alleged infringer was prejudiced or injured by the
13 delay. Id. at 1032. Prejudice may be either economic or evidentiary. Id. at 1033; see also,
14 e.g., Hearing Components, Inc. v. Shure Inc., 600 F.3d 1357, 1375-76 (Fed. Cir. 2010).

15 Application of the laches defense is discretionary, and it “is not established by undue
16 delay and prejudice. Those factors merely lay the foundation for the trial court’s exercise of
17 discretion.” Aukerman, 960 F.2d at 1036 (emphasis in original). The court “must weigh all
18 pertinent facts and equities in making a decision on the laches defense.” Id. at 1034.
19 Where the defense of laches is established, the patentee’s claim for damages may be
20 barred. Id. at 1028.

21 A rebuttable presumption of laches arises where a patentee delays bringing suit for
22 more than six years after the date the patentee knew or should have known of the
23 defendant’s “potentially infringing activities.” Wanlass v. General Elec. Co., 148 F.3d 1334,
24 1337 (Fed. Cir. 1998) (“Wanlass II”); see also Serdarevic v. Advanced Med. Optics, Inc.,
25 532 F.3d 1352, 1358 (Fed. Cir. 2008); Aukerman, 960 F.2d at 1028, 1035.

26 “[A]bsent other equitable considerations, a prima facie defense of laches is made out
27 upon proof by the accused infringer that the patentee delayed filing suit for six years after
28 actual or constructive knowledge of the defendant’s acts of alleged infringement.”

1 Aukerman, 960 F.2d at 1037; see also Wanlass v. Fedders Corp., 145 F.3d 1461, 1464
2 (Fed. Cir. 1998) (“Wanlass I”). Without the presumption, the facts of unreasonable delay
3 and prejudice “might reasonably be inferred from the length of the delay, but not
4 necessarily. With the presumption, these facts must be inferred, absent rebuttal evidence.”
5 Aukerman, 960 F.2d at 1037 (emphasis in original); Wanlass I, 145 F.3d at 1464.

6 The presumption has the effect of shifting the burden of going forward with evidence,
7 not the burden of persuasion. Aukerman, 960 F.2d at 1028. That is, once a defendant
8 establishes a presumption of laches on summary judgment, the burden shifts to the plaintiff
9 to rebut the presumption of laches by offering evidence to show an excuse for the delay or
10 that the delay was reasonable, or by offering evidence sufficient to place matters of
11 evidentiary and economic prejudice genuinely in issue. Serdarevic, 532 F.3d at 1359-60
12 (citing Aukerman, 960 F.2d at 1038). If the plaintiff presents a sufficiency of evidence
13 which, if believed, would preclude a direct finding in favor of the infringing defendant, the
14 presumption evaporates and the accused infringer will have to satisfy its burden of
15 persuasion with actual evidence. Aukerman, 960 F.2d at 1037-38.

16 Here, Sony does not directly argue – though it appears to be suggesting – that a
17 presumption of laches arises in this case because TVI was aware of Sony’s allegedly
18 infringing activities more than six years before filing the present lawsuit.⁷ To determine if
19 the presumption of laches applies, the court must determine whether the undisputed
20 evidence shows that TVI had actual or constructive knowledge of the alleged infringing
21 activities by Sony prior to February 2, 2004, six years before the date TVI filed the present
22 action.

23 Sony contends that TVI was well aware of Sony’s DVD players for 12 years prior to
24 filing this lawsuit, noting that the ‘307 patent had already issued when Sony launched its
25 DVD players in the U.S. in the fall of 1997, and that TVI’s three remaining patents issued

27 ⁷ Sony does argue more directly in its opposition to TVI’s motion that TVI’s delay in
28 filing this lawsuit “by law has created presumption of laches,” but its argument appears to be
based purely on the amount of time that elapsed between Sony’s introduction of its DVD
players and TVI’s filing of the lawsuit.

1 within the four years following. Sony argues that TVI could have sued Sony for infringing at
2 least one of the four patents from the day that Sony launched its DVD player, and also that
3 it could have sued Sony for patent infringement in 2002 when it filed the suit alleging that
4 Microsoft's "autoplay" feature infringed its patents, or in 2004 when it filed the suit alleging
5 that other computer manufacturers that used Windows also infringed its patents. Instead,
6 TVI delayed until 2010 to file the present action.

7 Sony notes that TVI filed suit against Sony in August 2004, alleging that Sony's
8 VIAO computers that included Windows infringed the patents-in-suit, and claims that
9 documents produced in discovery show that TVI "was in fact fully aware of Sony's DVD
10 players and the DVD standard." Sony also asserts that Mr. Redford "admitted" he was
11 "aware of" Sony's DVD players shortly after their release; and that "[n]umerous TVI
12 documents reveal that TVI considered Sony a potential licensing target since at least as
13 early as 1994," and that TVI was "developing technology that it sought to incorporate the
14 DVD standard and employ in DVD players, was aware of the technical aspects of DVD
15 technology, and sought to collaborate with DVD player manufacturers."

16 Sony also contends that TVI's constructive knowledge is established by documents
17 and testimony showing that TVI was aware of Sony's DVD players in 1997, and also by the
18 facts that it was "well known" that Sony first sold its DVD players in the fall of 1997 and was
19 among the best known brands of DVD players at that time, and that Sony's sales and
20 advertising and sales of its DVD players grew dramatically over the next seven years.
21 Similarly, Sony asserts, its introduction of the BD and PS3 products in 2006 was "well
22 known," as is the fact that it has been a "market leader of DVD and BD players in the U.S."

23 The court finds that the motions must be DENIED. As an initial matter, the
24 presumption of laches does not arise as to the Blu-Ray and PlayStation products, because
25 those products were introduced prior to February 2, 2004. Moreover, to the extent that
26 Sony argues that laches applies to bar TVI's infringement claims not only as to DVD
27 players but also as to "similar" products that "implement autoplay" (Sony's Blu-ray and
28 Playstation3 players), based on allegations in the first amended complaint regarding

1 infringement, and also based on its expert John Byrd’s opinions regarding various
2 similarities among the three types of devices, the court notes that TVI’s expert Dr. Andrew
3 Wolfe has explained in his expert report that Blu-ray and Playstation3 players are distinct
4 because they accept different files of predetermined names than do DVD players, and
5 share other differences in the startup procedure. Thus, at a minimum, the existence of
6 material disputed facts precludes a finding that the presumption applies to the Blu-ray and
7 PS3 players based on their “similarity” to the DVD players.

8 As for the DVD players, while it appears undisputed that Mr. Redford and others at
9 TVI were aware that Sony was selling its DVD players by late 1997 or perhaps 1998, Sony
10 has not provided evidence showing that Mr. Redford or TVI was aware of the alleged
11 “potentially infringing activities.” See Wanlass II, 148 F.3d at 1337. The mere fact that Mr.
12 Redford testified in his deposition that he “found out about [Sony’s DVD players] about the
13 same time that they became available” is insufficient, without more, to establish that he
14 knew or reasonably should have known that the DVD players infringed TVI’s patents.

15 In its argument, Sony cites to a variety of documents purporting to show TVI’s
16 awareness or constructive knowledge, but many of the documents involve technical
17 discussions and references that have not been interpreted or explained for the court, and/or
18 contain no obvious references to DVD players.

19 For example, Sony cites to a memo apparently prepared by Mr. Stern in March 1994
20 regarding “Trip to Japan,” which mentions Sony in connection with “demo Sega game” and
21 “MotionPad,” among other rather cryptic references, but does not actually use the term
22 “DVD.” Similarly, Sony cites to a December 1993 TVI memo to Sony Computer
23 Entertainment regarding a “TVI MotionPad™ proposal,” and certain “motion detection
24 technology,” which again does not refer to DVD players.

25 An August 1997 memo purportedly from Mr. Stern asks the recipient to talk to
26 someone at Toshiba in Tokyo and “find out who I can speak to about the DVD data
27 structure,” in particular the “VMGI, PCI, HLI, BTNIT data formats,” which does indeed
28 reference DVDs, but in such a way as to be incomprehensible to the court. Similarly, a

1 November 1997 email from someone at TVI to a Mr. Takagawa at a Japanese company
2 thanks him for his email regarding his “strategy toward the February IrDA meeting” and his
3 “continuous support to TVI,” and follows this with a summary of an earlier phone
4 conversation, the final point of which refers to an employee of “Philips” and the fact that
5 “[h]e requested a sample [of “SmartPaper Remote”] immediately for his internal demo to
6 Philips DVD and WebTV teams.”

7 Also included are a number of excerpts of hand-written pages from notebooks kept
8 by Mr. Redford and Mr. Stern, in which Sony has highlighted various instances of the usage
9 of “DVD,” but again, has provided no explanation or interpretation of these notes (which are
10 not comprehensible to the court) except insofar as it claims that such documents show that
11 TVI “was aware of the technical aspects of DVD technology and sought to collaborate with
12 DVD manufacturers.” None of this evidence is sufficient to establish that TVI delayed filing
13 suit for more than six years after actual or constructive knowledge of Sony’s allegedly
14 infringing activities with regard to its DVD players.

15 As Sony has failed to establish a presumption of laches, it can prevail on this
16 defense only if it can affirmatively meet its burden of showing either evidentiary or
17 economic prejudice because of TVI’s delay. See Wanlass II, 148 F.3d at 1337. Sony
18 asserts that it can show both evidentiary and economic prejudice, while TVI argues that
19 Sony lacks evidence sufficient to show either evidentiary or economic prejudice

20 “Evidentiary, or ‘defense’ prejudice, may arise by reason of a defendant’s inability to
21 present a full and fair defense on the merits due to the loss of records, the death of a
22 witness, or the unreliability of memories of long past events, thereby undermining the
23 court’s ability to judge the facts.” Aukerman, 960 F.2d at 1033. Persuasive evidence as to
24 evidentiary prejudice should show exactly what particular prejudice an alleged infringer will
25 suffer from the absence of witnesses or evidence. See Meyers v. Asics Corp., 974 F.2d
26 1304, 1308 (Fed. Cir. 1992).

27 Sony contends that the passage of time has resulted in the disappearance of
28 extensive evidence that is highly relevant to its defense of this case – in particular,

1 information and witness testimony relevant to prior art such as 3DO, CDTV, and CD-1,
2 dating back to the 1980s and early 1990s, which Sony requires to show that the TVI
3 patents are invalid. Sony claims that due to TVI's delay, "a substantial amount of
4 information and witnesses relevant to those prior art devices" are no longer available.

5 Sony argues that the 3DO product has been off the market for 15 years, and that
6 certain 3DO "documents and witnesses" that would have been available in 1997-2003 can
7 no longer be found, including a presentation Redford made to the board regarding 3DO.
8 Sony contends that the unavailability of documents and witnesses is due in part to the fact
9 that the company involved in that product filed for bankruptcy and destroyed many files.

10 With regard to CDTV, Sony contends that TVI's business records show that Redford
11 and others at TVI understood "various technical features" of CDTV, but never disclosed any
12 CDTV documents to the PTO, and all such "critical documents" have allegedly been
13 discarded. Sony claims that such lost documents are relevant to its inequitable conduct
14 and invalidity defenses.

15 As for CD-I, Redford testified that Phillip gave him a device in 1991, but he no longer
16 has it. Sony claims that TVI's documents also indicate that Redford and TVI had
17 "significant information" about CD-I, but those documents were also discarded by TVI.

18 Sony also claims that TVI co-inventor Donald Stern has "disappeared," and that his
19 absence constitutes a critical loss of evidence because of his knowledge of prior art and
20 also because of his contributions to the development of TVI's patents. Mr. Stern was
21 available during the Microsoft suits in the 2002-2005 time period, but now (according to
22 Sony) no one knows whether he is alive or dead. Sony claims to have hired a private
23 investigator to search for him in the Philippines, to no avail.

24 Finally, Sony argues that TVI acknowledges it experienced "extensive" loss of
25 records through fire or computer crashes, within six years of the date it learned about
26 Sony's DVD products (e.g., in 1998 and in 2003).

27 TVI's position is that Sony cannot establish that any delay prevented it from
28 presenting a "full and fair defense," as Sony has fully and fairly defended itself in this

1 litigation. Moreover, TVI notes, Sony has represented to the court that it is entitled to
2 summary judgment on the claims of infringement, validity, and inequitable conduct. TVI
3 contends that if it were really true that Sony had been prevented from defending itself, then
4 it could not simultaneously argue that it is entitled to summary judgment on all critical
5 issues in the case.

6 TVI also contends that it sought discovery from Sony on the issue of evidentiary
7 prejudice, but that Sony refused to offer a deposition witness, and responded to TVI's
8 interrogatories with a vague statement that failed to explain how it has been detrimentally
9 impacted by the lack of any specific evidence. TVI also notes that none of Sony's experts
10 has provided any opinion regarding prejudice in connection with Sony's laches defense,
11 despite Sony's counsel's objection to discovery on that issue.

12 As for the alleged missing documents, TVI asserts that it has produced more than
13 320,000 pages of documents, among those the documents produced during the Microsoft
14 litigation (which included documents from TVI's initial design and development period); and
15 that it has also offered to make available prototype and software from the relevant inventive
16 time period – but Sony chose not to inspect any of this evidence. TVI asserts further that
17 Sony has not explained what prior art – if any – or which related documents it is missing or
18 how such prior art or documents prejudice its invalidity defense.

19 Finally, with regard to witnesses, TVI contends that Sony has not identified any of
20 TVI's former employees, explained why he/she is relevant, identified any steps to contact
21 those employees, or demonstrated that no one in any of Sony's entities has comparable
22 knowledge. With regard to Mr. Stern, TVI argues that Sony has misrepresented the facts.
23 TVI claims to have identified Mr. Stern's address in the Philippines in May 2010, but argues
24 that Sony never attempted to subpoena him, despite the fact that the Philippines allows for
25 letters rogatory and depositions at the U.S. Embassy. Mr. Stern was also living in the
26 Philippines during the Microsoft litigation, and according to TVI, Microsoft managed to
27 depose him there.

28 The court finds that Sony has not met its burden of establishing evidentiary prejudice

1 based on TVI’s delay in filing suit. In particular, disputed issues remain regarding whether
2 documents essential to Sony’s defense are missing, or whether particular witnesses cannot
3 be located. In particular, the question of Mr. Stern’s ability to testify appears to be disputed.

4 “Economic prejudice may arise when a defendant and possibly others will suffer the
5 loss of monetary investments or incur damages which likely would have been prevented by
6 an earlier suit.” Aukerman, 960 F.2d at 1033 (citations omitted). Such damages are not
7 those attributable to a finding of liability on the patent infringement claims, as economic
8 prejudice would then arise in every suit. Id. Instead, the court must look for a change in
9 the economic position of the alleged infringer during the period of the delay. Id. Economic
10 prejudice is “likely to be a slippery issue to resolve.” Id. (citation omitted).

11 The court must also “consider and weigh any justification offered by the plaintiff for
12 its delay[,]” such as other litigation, negotiations with the accused, poverty and/or illness
13 under limited circumstances, extent of infringement, and disputes over the ownership of the
14 patents. Id. (citations omitted). This list is not exhaustive, and the listed factors will not
15 constitute sufficient justification in every case. Id.

16 Here, Sony asserts that the evidence shows it could have “cut off” any possible
17 damages claims years ago had it been sued or even charged with infringement on a timely
18 basis. Relying on the opinions of its expert Mr. Byrd, Sony argues that it could readily have
19 disabled the “autoplay” feature of its DVD players, or simply reloaded its operating system
20 between disc insertions.

21 Sony also claims that a finding of infringement will cause it economic harm based on
22 the fact that it has introduced many models of DVD players over the years, and first sold
23 the accused Blu-ray players and PS3 (PlayStation 3) in 2006. According to Sony, it could
24 easily have introduced other (non-infringing) products if it had been aware that TVI intended
25 to file suit, but that it didn’t know, and the result, as explained by its damages expert
26 Michael J. Wagner, was that it spent over \$20 billion on research and development

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1 between 2007 and 2011.⁸ Sony contends that all the associated research and
2 development expenses would have been avoided had it been placed on notice of TVI's
3 infringement claims.

4 As for the question whether Sony has established the ability or willingness to design
5 around the patents, Sony asserts that its Rule 30(b)(6) representative testified that Sony's
6 "technical expert" would provide such details, and that it has provided three non-infringing
7 alternatives through its expert Mr. Byrd.

8 For its part, TVI argues that Sony cannot prove any economic prejudice because it
9 cannot show that it would have done anything different if it had been sued earlier.
10 Economic prejudice requires an explicit nexus to the patentee's delay in filing suit. See
11 Hemstreet v. Computer Entry Sys. Corp., 972 F.2d 1290, 1294 (Fed. Cir. 1992). It is not
12 enough that the alleged infringer changed its position by, for example, investing in the
13 production of the allegedly infringing device. Rather, "[t]he change must be because of and
14 as a result of the delay, not simply a business decision to capitalize on a market
15 opportunity." Id. (citing Aukerman, 972 F.2d at 1033). Thus, TVI asserts, the crucial
16 question is whether Sony would have acted differently if sued earlier.

17 Here, TVI argues, Sony has no evidence to offer at trial to support any assertion of
18 economic prejudice. TVI contends that Sony's Rule 30(b)(6) representative refused to
19 answer questions at his deposition regarding designing around the asserted patents after
20 this litigation started, and refused to answer questions regarding whether Sony could have
21 redesigned around the patents after the Microsoft case.

22 TVI also asserts that Sony has offered no evidence that it ever disabled and
23 removed autoplay from any of its accused players (even after this case was filed), and that
24 it is questionable whether Sony's other suggested non-infringing alternative is even
25 feasible, as it has not been reduced to practice. As for Sony's claim that it has invested
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27 ⁸ Sony relies on Mr. Wagner's opinion to support this claim, although the court was
28 unable to confirm that Mr. Wagner actually rendered this particular opinion, as Sony failed to
point to the relevant portion of the report.

1 more than \$20 million in the accused products, TVI argues that this is not sufficient to show
2 economic prejudice, because there is no monetary nexus between this investment and the
3 timing of the lawsuit.

4 The court finds that Sony has not met its burden of showing that it has suffered or
5 will suffer economic prejudice as a result of TVI's delay in filing suit. At a minimum,
6 disputed issues of material fact exist with regard to this issue. Sony's argument regarding
7 research and development expenses is not clearly supported by evidence showing a nexus
8 with TVI's delay. As for Sony's argument that its technical expert – which the court
9 interprets as a reference to Mr. Byrd – will provide details regarding which non-infringing
10 alternatives Sony would have implemented, the court notes that while Mr. Byrd did provide
11 extensive opinions regarding the costs of redesigning the accused Sony products in order
12 to avoid infringing the TVI patents-in-suit, this is not necessarily the same as providing
13 evidence as to which non-infringing alternatives Sony would have provided had it been
14 anticipating that TVI would file suit.

15 Finally, with regard to TVI's articulated justifications for the delay in filing suit, the
16 court finds no need to address the other factors applicable to the question of the
17 reasonableness of the delay, in light of its ruling that Sony has not met its burden with
18 regard to establishing prejudice.

19 3. Equitable estoppel

20 In its answer and counterclaim, Sony alleges that TVI's infringement claims are
21 barred by the doctrine of equitable estoppel. Equitable estoppel is cognizable under 35
22 U.S.C. § 282 as an equitable defense to a claim of patent infringement. Where an alleged
23 infringer establishes the defense of equitable estoppel, the patentee's claim may be entirely
24 barred. Aukerman, 960 F.2d at 1028.

25 Three elements must be established to bar a patentee's suit by reason of equitable
26 estoppel. The alleged infringer must show (1) misleading conduct, which may include not
27 only statements and actions but silence and inaction, leading the alleged infringer to
28 reasonably infer that rights will not be asserted against it; (2) the alleged infringer's reliance

1 upon that conduct; and (3) that due to that reliance, the alleged infringer would be
2 materially prejudiced if the patentee were allowed to proceed with its claim. Id. No
3 presumption is applicable to the defense of equitable estoppel. Id.

4 In its motion, TVI argues that Sony cannot prevail on this defense because it cannot
5 show any material prejudice (as argued above in connection with the laches defense) and
6 also has no proof of reliance on any misrepresentation by TVI that TVI did not intend to
7 assert its patents against Sony.

8 In opposition, Sony asserts that disputed issues of fact preclude summary judgment
9 on this defense. Sony argues that TVI does not dispute that its failure to assert its patents
10 against Sony's DVD players when it sued Sony in 2004 was an action that prejudiced Sony,
11 but that it has only argued that Sony cannot show it relied on TVI's behavior.

12 Sony acknowledges that its Rule 30(b)(6) representative refused to answer certain
13 questions during his deposition, but argues that the problem was that counsel for TVI failed
14 to ask two crucial questions – whether Sony relied on TVI's failure to assert its patents
15 against Sony's DVD players in 2004, and what Sony would have done if TVI had filed suit
16 regarding Sony's DVD players in 2004. Sony claims that if TVI's counsel had asked these
17 questions, TVI would have learned that Sony did rely on TVI's failure to assert its patents,
18 and that if sued, it would have vigorously defended itself. In support of this argument, Sony
19 has provided a declaration from one of its attorneys – Jamie Siegel – who is also the
20 corporate representative who was deposed on the issue of reliance.

21 The court finds that TVI's motion must be DENIED. While it is true that Sony has
22 provided no clear evidence of reliance, there are material facts in dispute regarding whether
23 communications between TVI and Sony during the pendency of the Microsoft case “lulled
24 Sony into a sense of security” in going ahead and “settling” with TVI in that case, but then
25 continuing with its own sales of DVD, BD, and PS3 products.

26 4. Noninfringement

27 Sony argues that its products do not infringe TVI's '156 and '863 patents because
28 they do not “operatively couple” two host devices, and that its products do not directly or

1 indirectly infringe the method claims of the '532 or '307 patents.

2 To establish infringement of a patent, every limitation set forth in a claim must be
3 found in an accused product or process exactly or by a substantial equivalent. Jurgens v.
4 McKasy, 927 F.2d 1552, 1560 (Fed. Cir. 1991). There can be no infringement as a matter
5 of law where a claim limitation is totally missing from the accused device. Johnston v. IVAC
6 Corp., 885 F.2d 1574, 1577 (Fed. Cir. 1989). The motion of an accused infringer for
7 judgment on the ground of noninfringement of a patent may be granted where the
8 patentee's proof is deficient in meeting an essential part of the legal standard for
9 infringement, and no material issue of fact exists. Id.; see also TechSearch L.L.C. v. Intel
10 Corp., 286 F.3d 1360, 1369 (Fed. Cir. 2002).

11 a. Noninfringement of '156 and '863 patents

12 Sony argues that its products do not infringe TVI's '156 and '863 patents because
13 they do not "operatively couple" two host devices. Claim 1 of the '156 patent and Claims 1
14 and 9 of the '863 patent are means-plus-function claims. Each claims "a host device
15 comprising . . ." and includes the limitation "operatively couple."

16 Claim 1 of both patents includes the limitations "said means for detecting being
17 operatively coupled to said output lead of said peripheral and to said means for
18 automatically loading" and "said means for checking being operatively coupled to said
19 means for detecting." Claim 1 of the '156 patent also includes the limitation "said means for
20 starting up being operatively coupled to said means for checking," and Claim 9 of the '863
21 patent includes the limitations "said first means for checking being operatively coupled to
22 said means for detecting," "said second means for checking being operatively coupled to
23 said means for detecting," and "said means for starting up being operatively coupled to said
24 second means for checking."

25 In the Claim Construction Order, the court construed "means for automatically
26 loading an initialization file" which also appears in Claim 1 in both the '156 and '863 patents
27 as having a claimed function of "automatically loading an initialization file," and a
28 corresponding structure of "a host device programmed and/or configured to perform the

1 disclosed algorithm of checking for and using an initialization file during booting from either
2 a removable storage media (such as floppy disk) or a permanent storage medium which is
3 an integral part of the host device, and equivalents thereof.” See Claim Construction Order
4 at 13. Based on this, Sony argues that because the “means for checking” is part of the
5 same claim, the same structure “host device” corresponds, and that the corresponding
6 structure for “means for checking” is therefore a host device (e.g. computer) programmed
7 to perform the disclosed algorithm of detecting insertion of a storage media through polling
8 or use of an interrupt from a storage peripheral, and equivalents thereof.

9 As indicated above, the asserted claims require that the “means for checking” be
10 “operatively coupled” to another element, such as “said means for detecting.” Thus, Sony
11 argues, the literal construction of “said means for checking being operatively coupled to
12 said means for detecting” is “a host device . . . operatively coupled to a host device”
13 However, Sony asserts, that the same host device cannot be operatively coupled to itself; if
14 it could, the claim limitation would be meaningless.

15 Sony contends that TVI has changed its infringement contentions in an effort to
16 resolve this dilemma. For example, Sony notes that TVI's original infringement contentions
17 for the PS3 referred to the relevant structure for both the means for checking and means
18 for detecting as a "host device," but that when Sony pointed out that the accused products
19 do not operatively couple two host products, TVI changed the structure from “host devices”
20 to “programs.” That is, TVI’s infringement contentions identified the corresponding
21 structure as “a host device programmed to perform the disclosed algorithm of . . . ,” and Dr.
22 Wolfe’s reply expert report states that “in most cases, those claimed structures are
23 programs running on the same host processor.”

24 Sony claims that Dr. Wolfe also now states that “in each of the disclosed
25 embodiments, the claimed means-plus-function elements are operatively coupled when
26 information flows from one structure to another.” Sony argues, however, that even if that is
27 what “operatively coupled” meant, the claims would still require information flowing from
28 one host device to another, not from one “program” to another “program.” Sony also notes

1 that the specification mentions “operatively coupled” only once, to describe a physical
2 connection between separate components (citing '156 patent 19:31-33). Claim 1 of the
3 '156 and '863 Patents further require operatively coupling the means/host to the output lead
4 of a peripheral, which Sony argues is another clear reference to a physical connection
5 between different devices.

6 In opposition, TVI argues that there is no basis for the court to consider and find a
7 replacement for two “host devices” in the ‘156 and ‘863 patents. TVI notes that this new
8 theory – that the ‘156 and ‘863 patents require two host devices in order to be valid – was
9 never raised at claim construction, and is contradicted by Sony’s invalidity theory
10 throughout this case.

11 In addition, TVI asserts, since claims must be construed the same for both validity
12 and infringement, Sony has waived any right to now assert that the claims require two host
13 devices; and that in any event, because Sony never asked to have the term “operatively
14 coupled” construed, the ordinary meaning should apply. Finally, TVI contends that contrary
15 to Sony’s representation, TVI has consistently asserted its infringement theory.

16 The court finds that Sony has not met its burden of establishing noninfringement by
17 showing that TVI’s proof is deficient in meeting an essential part of its claim of infringement.
18 At a minimum, disputed issues of fact preclude summary judgment. Accordingly, the motion
19 for summary judgment of noninfringement of the ‘156 and ‘863 patents is DENIED.

20 b. Noninfringement of ‘532 and ‘307 patents

21 Sony contends that the court should find that Sony’s products do not directly or
22 indirectly infringe the method claims of the ‘532 and ‘307 patents because TVI has no
23 evidence that Sony directly performed all claimed steps, and because TVI has no evidence
24 that Sony had the intent or knowledge required to prove indirect infringement.

25 The ‘532 and ‘307 Patents expressly claim methods. To prove direct infringement by
26 Sony, TVI must show that Sony performed each and every step of the claimed method in
27 the United States. Meyer Intellectual Props. Ltd. v. Bodum, Inc., 690 F.3d 1354, 1371
28 (Fed. Cir. 2012). Sony argues that TVI cannot survive summary judgment merely by

1 showing Sony's products are capable of performing the claimed steps, or that an end user
2 likely performed the claimed steps – but must prove Sony itself actually performed each
3 step. While that standard would apply if TVI had moved for summary judgment of
4 infringement, the court notes that the standard is somewhat different here.

5 When a party moving for summary judgment does not bear the ultimate burden of
6 proof on an issue, that party can satisfy its initial burden by showing that there is an
7 absence of evidence to support the moving party's case. See Celotex, 477 U.S. at 325.
8 Thus, an accused infringer seeking summary judgment of noninfringement may meet its
9 initial burden by providing evidence that would preclude a finding of infringement, or by
10 showing that the evidence on file fails to establish a material issue of fact essential to the
11 patentee's case. Novartis Corp. v. Ben Venue Labs, Inc., 271 F.3d 1043, 1046 (Fed. Cir.
12 2001); see also Exigent Tech., Inc. v. Atrana Solutions, Inc., 442 F.3d 1301, 1308-09 (Fed.
13 Cir. 2006).

14 Sony argues that TVI has no evidence that Sony infringes the claimed methods,
15 which require more than simply autoplaying content upon disc insertion. The '532 claims
16 require “continuing to detect insertion without rebooting” (i.e., detection of at least a second
17 disc without rebooting). The '307 claims, according to TVI, all require “returning to said
18 step of automatically enabling” without rebooting.

19 Thus, Sony argues, a second disc is required in order to detect insertion and begin
20 playback of content. According to Sony, TVI's infringement contentions state this step
21 “occurs when the inserted BD-ROM is removed and the player is prepared to accept
22 another BD-ROM.” Sony contends that while TVI may argue its '307 claims could be met
23 merely by inserting one disc, this is contrary to TVI's “admissions” and in any case is a new
24 issue of claim construction by TVI.

25 Sony contends that TVI's only evidence that Sony performs the claimed methods in
26 the U.S. relates to certain testing of BD and DVD players in the U.S., and usage of PS3
27 consoles at U.S. tradeshows. However, Sony asserts, TVI has not alleged that PS3
28 consoles are tested in the U.S. and its only allegation that the BD and DVD players are

1 tested in the U.S. is based upon the testimony of Sony's Rule 30(b)(6) witness that Sony
2 tests "general playback, power-on, basic usage as a customer would have of the product."
3 As to actual use by Sony of the PS3 and BD/DVD players, Sony claims that TVI relies
4 solely on testimony of Sony's 30(b)(6) witnesses stating generally that Sony demonstrated
5 those products at some U.S. tradeshows, but not how Sony demonstrated the products
6 (e.g., one disc could have been left in all day).

7 Thus, Sony argues, TVI has adduced no evidence that Sony performed the claim
8 steps of "returning" and "continuing" during those limited tests and tradeshows. For
9 example, Sony claims there is no evidence that it used more than a single test disc in its
10 limited U.S. testing of DVD and BD players (which are made overseas), and no evidence
11 that the PS3 was ever tested by Sony in the U.S.

12 Sony contends that TVI cannot respond to its lack of evidence by speculating that
13 Sony must have inserted a second disc or ejected a disc to place the device in a state
14 where it can detect a new disc at some point during a trade show or testing, because
15 speculation is "clearly not the same as proof." Thus, Sony argues, TVI has failed to adduce
16 sufficient evidence that Sony directly infringed the method claims of the '532 and '307
17 Patents.

18 Sony also argues that TVI has no evidence that Sony had the intent or knowledge
19 required for indirect infringement or contributory infringement. Sony claims that TVI alleges
20 that Sony actively induced its customers to infringe the '532 and '307 Patents. Sony
21 argues, however, that liability for inducement requires knowledge that the induced acts
22 constitute patent infringement. See Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct.
23 2060, 2068 (2011). Inducement requires that the alleged infringer knowingly induced
24 infringement and possessed a specific intent to encourage another's infringement. In re Bill
25 of Lading Transmission & Processing Sys. Patent Litig., 681 F.3d 1323, 1339 (Fed. Cir.
26 2012). Thus, Sony argues, even if TVI had proof that third parties in the U.S. used the
27 accused products to perform all steps of the method claims, TVI has failed to identify any
28 facts that Sony knew the third parties' infringed.

1 According to Sony, Dr. Wolfe “suggested” that Sony may have gained such
2 knowledge of infringement during the Microsoft suit, but Sony notes that that suit related to
3 Windows and PCs, not DVD, BD or PS3 players, and that it did not involve any of the Sony
4 entities in this case responsible for PS3 consoles. Sony contends that TVI also cannot
5 dispute that it never advised Sony at any time prior to filing this lawsuit that Sony's DVD,
6 BD and PS3 players allegedly infringe the patents.

7 Sony also claims that Dr. Wolfe “admitted” he is not aware of any evidence that TVI
8 ever put Sony on notice of alleged infringement by its DVD players prior to filing the present
9 case, and TVI has not submitted no evidence to the contrary. Sony contends that as noted
10 in the argument regarding laches, TVI's actions during and since that suit gave Sony “every
11 reason to believe” that the currently accused products did not infringe the TVI patents.
12 Further, Sony argues, other than a reference to user manuals, Dr. Wolfe “admitted” he was
13 not aware of any evidence that Sony intended to encourage its customers to infringe any of
14 TVI's patents, and that Redford also “admitted” that TVI has no such evidence.

15 In opposition, TVI argues that it has substantial evidence that Sony directly
16 performed all steps of the asserted method claims, and also has substantial evidence with
17 which it intends to prove indirect infringement at trial. First, TVI contends that it has
18 evidence that Sony tested its accused Blu-ray and DVD players in the U.S., and
19 demonstrated its Blu-ray, DVD, and PS3 players at trade shows in the U.S. Dr. Wolfe
20 states in his reports that by testing and demonstrating the playback and power-on operation
21 of each of its DVD and Blu-ray models, Sony has performed all steps of the asserted
22 method claims. TVI asserts that this evidence is sufficient to create at least a triable issue
23 of material fact as to whether Sony performed each step of the asserted method claims.

24 With regard to Sony's argument that TVI's evidence is insufficient because TVI must
25 show that a second disc was tested or demonstrated, TVI responds that this is attorney
26 argument unsupported by evidence, and this position also has no basis in the claim
27 language.

28 TVI also contends that it has substantial evidence with which it intends to prove

1 indirect infringement at trial. TVI asserts that the evidence shows that Sony has known
2 about TVI's patents for years – at least as far back as the Microsoft litigation; and that there
3 is clear evidence that Sony repeatedly came across TVI's patent portfolio while prosecuting
4 its own patent applications, as TVI's patents were cited during prosecution of at least 17 of
5 Sony's patents over the years.

6 Similarly, TVI claims that there is evidence sufficient to support a finding that Sony
7 intended to induce its customers to infringe the asserted patents. Induced infringement
8 requires evidence of activities from which the jury may infer that the accused infringer acted
9 with a specific intent to encourage another's direct infringement. See, e.g., Ricoh Co., Ltd.
10 v. Quanta Computer Inc., 550 F.3d 1325, 1342-43 (Fed. Cir. 2008). Knowledge of the
11 patents coupled with control over the design and manufacture of the product that is used
12 for direct infringement may also support an inference of specific intent to cause
13 infringement. See id.

14 TVI contends that it has ample evidence that Sony designed and manufactured the
15 accused devices and, as shown above, had detailed knowledge of the patents, and also
16 that it instructed its customers on how to use the accused products in an infringing way –
17 and that in any event, the normal use of the accused products to play movies infringes the
18 asserted method claims, as autoplay is the default setting for Sony's products. Moreover,
19 TVI argues, in the face of knowledge of the patents and its products' practice of the claimed
20 methods, Sony changed nothing but instead continued to market, produce and sell the
21 accused devices, providing additional compelling evidence of intent. See Mentor H/S, Inc.
22 v. Medical Device Alliance, Inc., 244 F.3d 1365, 1379 (Fed. Cir. 2001).

23 Alternatively, TVI argues that the evidence at least establishes Sony's willful
24 blindness to infringement by the accused products. An infringer cannot avoid
25 indirect infringement "by deliberately shielding themselves from clear evidence of critical
26 facts that are strongly suggested by the circumstances." Global-Tech, 131 S. Ct. at 2068.
27 TVI argues that based on the record above, Sony cannot avoid this conclusion on summary
28 judgment, as it cannot deny that it knew of the asserted patents and a charge of

1 infringement in 2004, along with TVI's patent family throughout Sony's effort to seek patent
2 protection on its products. TVI contends that any claim of deniability by Sony is a dispute
3 for the jury.

4 The court finds that Sony has not met its burden of establishing noninfringement by
5 showing that TVI's proof is deficient in meeting an essential part of its claim of infringement.
6 Moreover, disputed factual issues exist with regard to, e.g., whether Sony performed each
7 step of the asserted method claims. Accordingly, the motion for summary judgment of
8 noninfringement of the '532 and '307 patents is DENIED.

9 **CONCLUSION**

10 In accordance with the foregoing, Sony's motions for summary judgment of invalidity
11 are DENIED; TVI's motion for summary judgment as to inequitable conduct, laches, and
12 equitable estoppel is DENIED; and Sony's motion for summary judgment as to inequitable
13 conduct, laches, and non-infringement is DENIED.

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15 **IT IS SO ORDERED.**

16 Dated: December 3, 2012

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19 PHYLLIS J. HAMILTON
20 United States District Judge
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