

1 David M. Barkan (State Bar #160825/barkan@fr.com)
Craig R. Compton (State Bar #215491/compton@fr.com)
2 FISH & RICHARDSON P.C.
500 Arguello St., Suite 500
3 Redwood City, CA 94063
Telephone: (650) 839-5070
4 Facsimile: (650) 839-5071

5 David S. Shuman (State Bar #200406/shuman@fr.com)
FISH & RICHARDSON P.C.
6 12390 El Camino Real
San Diego, CA 92130
7 Telephone: (858) 678-5070
Facsimile: (858) 678-5099

8 Attorneys for Defendants
9 SONIC SOLUTIONS and NAPSTER, INC.

10
11 UNITED STATES DISTRICT COURT
12 CENTRAL DISTRICT OF CALIFORNIA

13
14 OPTIMA TECHNOLOGY
CORPORATION,
15
16 Plaintiff,

17 v.

18 SONIC SOLUTIONS and
19 NAPSTER, INC. (f/k/a Roxio, Inc.),
20 Defendants.

21 AND RELATED CROSS-CLAIMS
22
23
24
25
26
27
28

Case No. 03-CV-1776 JVS (ANx)

**MEMORANDUM OF POINTS &
AUTHORITIES IN SUPPORT OF
DEFENDANTS' MOTION FOR
SUMMARY JUDGMENT OF NON-
INFRINGEMENT**

Date: October 17, 2005
Time: 1:30 pm
Courtroom: 10C

Table of Contents

Page

1			
2			
3	I.	INTRODUCTION	1
4	II.	TECHNICAL BACKGROUND AND PRIOR CLAIM CONSTRUCTION.....	3
5	A.	The '531 Patent	3
6	B.	Optima, the Optical Storage Industry, and this Lawsuit	4
7	C.	The Accused Products and the UDF 1.50 Standard	5
8	III.	APPLICABLE LAW	7
9	A.	Legal Standards For Infringement.....	7
10	B.	Literal Infringement vs. The Doctrine of Equivalents	8
11	IV.	ARGUMENT	10
12	A.	Defendants Do Not Literally Infringe The '531 Patent As a Matter of Law	11
13			
14	1.	The "VAT ICB" – the Only Data Structure Stored At the End of a UDF Track – Does Not Contain the Start Address of Any Track, or the End Address of Every Track.	11
15			
16	2.	No UDF Data Structure References the Start or End Block of Every UDF Track.	12
17			
18	3.	Defendants Also Do Not Infringe Because The Accused Products Always Create an "ISO 9660" Track, and No Data Structure Provides the Start or End Address for the ISO 9660 Track.....	14
19			
20	B.	As a Matter of Law, the Accused Software Cannot Infringe the '531 Patent Under the Doctrine of Equivalents.	16
21			
22	1.	Undisputed Facts Establish That No Combination of Data Structures in the Accused Products Are Equivalent to a "Track Information Map."	17
23			
24	2.	Asserting that a File System Without a Track Information Map is Equivalent to a File System With One Would Violate the All-Elements Rule.	20
25			
26	3.	Prosecution History Estoppel Prevents Optima From Claiming any Range of Equivalents for the Limitation "Track Information Map."	21
27			
28			

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

C. There Can Be No Literal or Doctrine-Of-Equivalents
Infringement Because the Operating System is Never
Routed "Directly" to File Data.24

V. CONCLUSION.....25

Table of Authorities

Page(s)

Other Authorities

1		
2		
3	<u>Amhil Enterprises Ltd. v. Wawa, Inc.,</u>	
4	81 F.3d 1554, 1562 (Fed. Cir. 1996)	8
5	<u>Asyst Techs., Inc. v. Emtrak, Inc.,</u>	
6	402 F.3d 1188, 1195 (Fed. Cir. 2005)	10, 20, 25
7	<u>Avia Group Int'l., Inc. v. L.A. Gear California, Inc.,</u>	
8	853 F.2d 1557, 1560 (Fed. Cir. 1988)	7
9	<u>Biagro Western Sales, Inc. v. Grow More, Inc.,</u>	
10	-- F.3d --, 2005 WL 2207685 at *8 (Fed. Cir. Sep. 13, 2005).....	24
11	<u>Business Objects, S.A. v. Microstrategy, Inc.,</u>	
12	393 F.3d 1366, 1374 (Fed. Cir. 2005)	9, 17
13	<u>Carroll Touch, Inc. v. Electro Mechanical Systems, Inc.,</u>	
14	15 F.3d 1573, 1579 (Fed. Cir. 1993)	8
15	<u>Chemical Eng'g Corp. v. Essef Indus., Inc.,</u>	
16	795 F.2d 1565, 1571 (Fed. Cir. 1986)	7
17	<u>Conopco, Inc. v. May Dep't Stores Co.,</u>	
18	46 F.3d 1556, 1562 (Fed. Cir. 1994)	20
19	<u>Cooper Cameron Corp. v. Kvaerner Oilfield Prods., Inc.,</u>	
20	291 F.3d 1317, 1322 (Fed. Cir. 2002)	25
21	<u>DeMarini Sports, Inc. v. Worth, Inc.,</u>	
22	239 F.3d 1314, 1330-34 (Fed. Cir. 2001)	8
23	<u>Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.,</u>	
24	535 U.S. 722, 727, 122 S. Ct. 1831, 1835 (2002)	9, 10, 23, 24
25	<u>Freedman Seating Co. v. American Seating Co.,</u>	
26	- F.3d --, 2005 WL 1903786 at *11 (Fed. Cir. Aug. 11, 2005)	20, 21
27	<u>Hoffer v. Microsoft Corp.,</u>	
28	405 F.3d 1326, 1330 (Fed. Cir. 2005)	10
	<u>Honeywell International Inc. v. Hamilton Sundstrand Corp.,</u>	
	370 F.3d 1131, 1142 n.8 (Fed. Cir. 2004)	10, 21, 23
	<u>Lockheed Martin Corp. v. Space Sys./Loral, Inc.,</u>	
	324 F.3d 1308, 1318 (Fed. Cir. 2003)	9
	<u>Moore, U.S.A., Inc. v. Standard Register Co.,</u>	
	229 F.3d 1091, 1106 (Fed. Cir. 2000)	25
	<u>Pennwalt Corp. v. Durand-Wayland, Inc.,</u>	
	833 F.2d 931, 935 (Fed. Cir. 1987)	8

Table of Authorities
Continued

Page(s)

1	<u>Perkin-Elmer Corp. v. Westinghouse Elec. Corp.</u> ,	
	822 F.2d 1528, 1532 n.6 (Fed. Cir. 1987)	17
2		
3	<u>Sage Prods., Inc. v. Devon Indus., Inc.</u> ,	
	126 F.3d 1420, 1423 (Fed. Cir. 1997)	9
4	<u>Seachange Int'l, Inc. v. C-COR, Inc.</u> ,	
	413 F.3d 1361, 1378 (Fed. Cir. 2005)	10, 20
5		
6	<u>Tanabe Seiyaku Co. v. United States Int'l Trade Comm'n.</u> ,	
	109 F.3d 726, 731 (Fed. Cir. 1997)	8
7	<u>TechSearch L.L.C. v. Intel Corp.</u> ,	
	286 F.3d 1360, 1376 (Fed. Cir. 2002)	7, 8
8		
9	<u>Wahpeton Canvas Co., Inc. v. Frontier, Inc.</u> ,	
	870 F.2d 1546, 1553 (Fed. Cir. 1989)	11
10	<u>Warner-Jenkinson Co. v. Hilton Davis Chem. Co.</u> ,	
	520 U.S. 17, 29, 117 S. Ct. 1040 (1997).....	8, 9, 10
11		
12	<u>Warner-Lambert Co. v. Apotex Corp.</u> ,	
	316 F.3d 1348, 1363 (Fed. Cir. 2003)	7
13	<u>Regulations</u>	
14	35 U.S.C.	
	§ 102.....	22
15		
16	Fed. R. Civ. P.	
	Rule 56(c).....	7
17	Fed. R. Evid.	
	Rule 801(d)(2)(B)	7
18		
19	Fed. R. Evid.	
	Rule 801(d)(2)(D)	7
20		
21		
22		
23		
24		
25		
26		
27		
28		

1 **I. INTRODUCTION**

2 In September, 2004, the Court held a *Markman* hearing in which the
3 interpretation of the phrase "track information map" as used in Optima's U.S. Patent
4 No. 5,666,531 ("the '531 patent," Ex. A) was by far the most hotly contested issue at
5 the hearing.¹ The reason for that is simple: by the time of the *Markman* hearing,
6 Optima was well aware that the Defendants' accused software for recording CD-R's
7 does not employ any data structure that identifies the start and end logical block
8 addresses for each track on the disc. For that reason, Optima argued that a track
9 information map was merely "a data structure used to locate information stored in
10 tracks on the CD, written upon completion of data entry." [Optima's Opening
11 *Markman* Brief (Ex. B) at 15]. This Court properly rejected that construction,
12 concluding that the '531 patent specification made it clear that the patentee, acting as
13 his own lexicographer, defined "track information map" as:

14 A data structure that is stored on the last user data blocks on the last
15 packet of the track. It contains the start logical block address of the
16 directory, and the start and end logical block address of every track.

17 [*Markman* Order (Ex. C) at 17.]

18 As will be shown in this motion, Optima's infringement theory attempts to
19 recapture the same broad construction it lost during claim construction by arguing,
20 incorrectly, that any data structure that can be used to ultimately locate files stored in
21 tracks on a CD is a track information map.

22 While Optima and its expert will attempt to cloak their theory by parroting the
23 language of the Court's claim construction when opposing summary judgment, a
24 conclusory assertion of infringement is never enough to avoid summary judgment.
25 Here, the undisputed record establishes that there is no data structure employed by the
26 accused products that meets the Court's definition, let alone any such data structure
27 "stored on the last user data blocks of the last packet of the track." In fact, the

28

¹ Citations to exhibits refer to the exhibits attached to the Declaration of Craig R. Compton, "Compton Decl." filed concurrently with this brief.

1 undisputed record as reflected in the deposition of Optima's expert establishes that:

- 2 • There is no data structure stored at the end of a track – or
3 anywhere on the disc – that contains the start logical block address of
4 any track; and
- 5 • There is no data structure stored at the end of a track – or
6 anywhere on the disc – that contains the end logical block address of
7 every track.

8 Optima's infringement case cannot be saved by the doctrine of equivalents
9 because the accused products do not employ any data structures that are “equivalent
10 to” – that is, insubstantially different from, a track information map. This motion will
11 establish that there can be no reasonable dispute regarding the substantial differences
12 between the way the accused products operate and the way the track information map
13 operates.

14 Moreover, Optima's theory of equivalents is legally barred by both the “all
15 elements” rule and by prosecution history estoppel. The "all-elements" rule precludes
16 Optima from claiming that any data structure that allows a CD-R to function like a
17 rewritable disc is necessarily equivalent to the track information map data structure
18 recited in the '531 patent claims. Optima's theory would render the Court's
19 construction of "track information map" meaningless and thereby run afoul of both
20 Supreme Court and Federal Circuit precedent explaining that expansive theories of
21 equivalence such as Optima's should be rejected as a matter of law on summary
22 judgment. In addition, prosecution history estoppel further bars Optima from
23 claiming any range of equivalents for the limitation of "track information map"
24 because Optima originally sought a broad claim without the requirement of a track
25 information map, then cancelled that claim when it was rejected by the Patent Office
26 as invalid in light of the prior art.

27 Finally, Optima's infringement theory fails for an additional and independent
28 reason. The accused products do not route an operating system "directly" to the most

1 recent versions of files, as the '531 claims require. Rather, the routing is
2 accomplished by "indirection," in which the operating system must follow a chain of
3 pointers contained within multiple discrete data structures. As a matter of law,
4 accessing files through "indirection" cannot be an equivalent of accessing files
5 "directly," because those terms are opposites of each other.

6 **II. TECHNICAL BACKGROUND AND PRIOR CLAIM CONSTRUCTION**

7 **A. The '531 Patent**

8 As noted in the Court's *Markman* Order, the '531 Patent "relates to a new
9 recording technique that allows a standard recordable CD-ROM drive to appear to,
10 and be accessed by, a user in the same manner as a non-volatile memory such as a
11 hard disk or a floppy disk storage media." [Ex. A at 1:5-9].² The '531 technique
12 employs a "special" data structure, called a "Track Information Map" to locate
13 directories and files stored on the CD. [Ex. A at 3:16-18.] This Court has already
14 found that Optima had a very specific meaning in mind for the term "track
15 information map" – namely, that it is a data structure which includes the logical block
16 addresses for: (a) the start of the directory; (b) the *start* of every track on the CD; and
17 (c) the *end* of every track on the CD. [Ex. C at 17.] The Court also determined that
18 the track information map must be "stored on the last user data blocks on the last
19 packet of the track." [Id.]

20 Optima has asserted independent claims 1 and 5 and dependent claims 4 and 8.
21 All of these claims require the steps of "writing of a track information map" and
22 "closing the track where the data is entered." [Ex. A at 6:8-19, 63-64].³

23 Like a phonograph record, the recordable area of the disc occupies a spiral
24 pattern, which is apportioned into units called "blocks." As the Court found in the
25 *Markman* proceedings, a "track" is "a grouping of one or more packets, each of which
26

27 ² References to the '531 patent (Ex. A) will be cited in the form *Column:Lines*.

28 ³ Independent claim 1 (and consequently dependent claim 4) uses the word "data" while independent claim 5 (and dependent claim 8) use the word "information." That difference in terminology is of no relevance to this motion.

1 is comprised of a grouping of contiguous user data blocks."
2 [Ex. C at 17.] In addition, the '531 patent recites the step of
3 "closing the track," after which the information on the disc can
4 be depicted as shown in Figure 2b.

5 Figure 2b, depicted on the right, is taken directly from
6 the '531 patent and shows the basic concept underlying the '531
7 patent – that each track consists of files and a directory, and
8 always concludes with the special track information map
9 (labeled "track info map" in the figure). The numerals "12"
10 and "14" in the illustration identify Tracks 1 and 2,
11 respectively. [Ex. A at 3:65-4:1.] Thus, under the Court's
12 claim construction, each location labeled "track info map" must

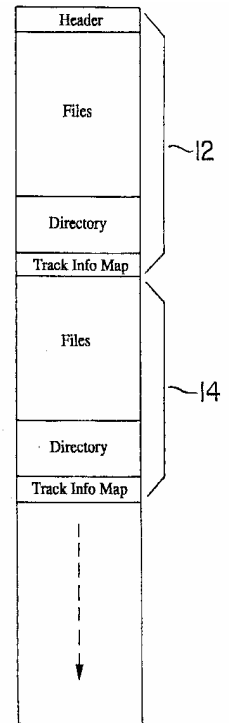


FIG. 2b

13 include a data structure that contains the start logical block
14 address of the current directory and the start and end addresses
15 of every track on the disc. Specifically, in the example shown in Figure 2b, the first
16 "track info map," written at the end of Track 1, would contain the start logical block
17 address of the directory contained in Track 1 as well as the start and end logical block
18 addresses of Track 1. The second "track info map" would contain the start logical
19 block address of the directory contained in Track 2 and the start and end addresses of
20 every track up to and including Track 2 – in other words, the second Track info map
21 would include the track start and end address information for Track 1 and Track 2.

22 **B. Optima, the Optical Storage Industry, and this Lawsuit**

23 When Optima filed the '531 application in 1995, the optical storage industry
24 was developing a standard method by which a write-once recordable CD could be
25 used like a rewriteable medium such as a floppy disk or hard disk. In 1997, the
26 members of the Optical Storage Technology Association (OSTA) published version
27 1.50 of the "UDF" (Universal Disk Format) standard, which describes a solution
28 completely different from Optima's – UDF makes no use of a "track information

1 map" or anything remotely like it. [Compton Decl. Ex. I (UDF Specification)] As
2 recordable-CD drives became standard equipment on personal computers, the market
3 for UDF-compliant CD-writing software grew. At the same time, Optima, whose
4 CD-writing technique was inferior to and incompatible with UDF, withered and died.
5 [Compton Decl. Ex. Q (Plaintiff's Responses to Defendant's Second Set of
6 Interrogatories)]

7 At its core, this case is simply an improper attempt by Optima to expand a
8 narrow, commercially rejected technique into something that covers the entire
9 universe of UDF-compliant products, in the hope of profiting from the work of
10 others. Optima has claimed that the present Defendants are only the first of many
11 targets, since, it says, practically the entire computer industry infringes the '531
12 patent. [Compton Decl. Exs. D-E (Press Release dated May 22, 2004 and Article
13 dated December 16, 2003).]

14 **C. The Accused Products and the UDF 1.50 Standard**

15 The accused products, "DirectCD" and "Drag-to-Disc," are software
16 applications that allow a user to implement the UDF 1.50 standard to write to a CD-R
17 disc as if it were a rewritable medium, allowing the recording of data in small
18 increments as opposed to writing an entire track or disc at once. Optima's
19 infringement contentions are not based on any features unique to DirectCD and Drag-
20 to-Disc; rather, Optima contends that these products infringe because they implement
21 the UDF 1.50 standard. [Compton Decl. Ex. F (Optima's Final Infringement
22 Contentions) at 2; Compton Decl. Ex. G (Tempelmann Depo.) at 20:19-25.]

23 A computer reading or writing a UDF disc makes extensive use of the
24 technique of "indirection," whereby files and directories on the disc are located by
25 following a series of "pointers." [Compton Decl Ex. G (Tempelmann Depo.) at
26 52:18-22 (defining "indirection").] When the operating system wants to retrieve data
27 for a file, for example, "test.doc," the operating system must first search the directory
28 for the "File Identifier Descriptor" (FID) associated with that filename. [Compton

1 Decl Ex. H (Fry Depo.) at 59:18-60:6.]⁴ The FID for "test.doc" contains a pointer to
2 another data structure, the "File Entry" (FE) uniquely associated with the most recent
3 version of "test.doc." [Id. at 36:13-17, 38:15-21.] In turn, the FE for "test.doc"
4 includes a list of "allocation descriptors" identifying the locations on the disc where
5 each chunk (i.e., each "extent") of data associated with "test.doc" is stored. [Id. at
6 111:10-112:8.] Only by following the chain of pointers through multiple data
7 structures, each stored in a separate block of the disc, can the operating system find
8 the data for the requested file.

9 On a write-once medium like a CD-R, data, once written, cannot be erased.
10 Consequently, whenever a user wants to modify data already on the disc, the new
11 data must be stored on an unwritten portion of the disc, at a location that will
12 necessarily differ from the location occupied by the old version of the data. Any
13 technique for solving this problem must implement some system for keeping track of
14 where on the disc the current version of any particular file resides.

15 In UDF 1.50, the solution is completely different from the TIM concept relied
16 upon by the '531 patent. To keep track of the locations of evolving files, UDF 1.50
17 employs a "Virtual Allocation Table," or "VAT," which correlates "virtual addresses"
18 with block addresses on the disc. Thus, while the first extent of the "test.doc" file
19 may always have a virtual address of 100, version 1 of that file extent may be stored
20 at address 200 on the disc, while version 2 of that file extent may be stored at address
21 750, etc. [Compton Decl. Ex. H (Fry Depo.) at 52:22-53:10.] Under this system,
22 storing a new version of "test.doc" does not require rewriting all the structures that
23 point to that file data. All that needs to be written to the disc is the new version of the
24 file itself, and a new VAT translating "virtual block 100" into the real address for that
25 virtual block number ("750" in the example above).

26 The VAT itself is also a file, and as such has a File Entry that points to it.
27 [Compton Decl. Ex. I (UDF Specification) at 26, § 2.2.10.] The FE for the VAT is

28 ⁴ Greg Fry was deposed as the Defendants' 30(b)(6) witness on topics regarding the UDF specification and the operation of the accused products.

1 known as the "VAT ICB" (Information Control Block). [Id.; Compton Decl. Ex. H
2 (Fry Depo.) at 38:15-16.] As discussed above, UDF 1.5 requires that the VAT ICB
3 be recorded in the last recorded block on the disc. [Compton Decl. Ex. I (UDF
4 Specification) at 101, § 6.10.1.1] When the VAT is small enough, it can be
5 "embedded" within the VAT ICB so that the VAT ICB and VAT both occupy the
6 same block. [Id. at 27, § 2.2.10.] If the VAT is larger, it can be recorded in a block
7 or blocks preceding the VAT ICB. [Id.]

8 Significantly, no data structure in a UDF file system includes any information
9 about tracks, or any information from which the start or end addresses of tracks can
10 be discerned. [Compton Decl. Ex. H (Fry Depo.) at 101:5-21, 207:7-9; (Compton
11 Decl. Ex. J (Media Sciences Report)) at 8.]⁵

12 **III. APPLICABLE LAW**

13 **A. Legal Standards For Infringement**

14 The standard for summary judgment in a patent case is no different than any
15 other case – it is appropriate when "the pleadings, depositions, answers to
16 interrogatories, and admissions on file, together with the affidavits, if any, show that
17 there is no genuine issue as to any material fact and that the party is entitled to
18 judgment as a matter of law." Fed. R. Civ. P. 56(c); Avia Group Int'l., Inc. v. L.A.
19 Gear California, Inc., 853 F.2d 1557, 1560 (Fed. Cir. 1988). The Federal Circuit has
20 stated that non-infringement is an issue on which it has "repeatedly upheld a grant of
21 summary judgment." Chemical Eng'g Corp. v. Esfef Indus., Inc., 795 F.2d 1565,
22 1571 (Fed. Cir. 1986); see also, e.g., Warner-Lambert Co. v. Apotex Corp., 316 F.3d
23 1348, 1363 (Fed. Cir. 2003) (affirming summary judgment of non-infringement);
24 TechSearch L.L.C. v. Intel Corp., 286 F.3d 1360, 1376 (Fed. Cir. 2002) (same);

25
26
27 ⁵ In its Revised Preliminary Infringement Contentions, Optima specifically relied on
28 the specially-commissioned Media Sciences report (Ex. J) as evidence supporting
its infringement theory. [Optima's Revised Preliminary Infringement Contentions
(Ex. K) at 2, 5, 9, 14, 18, 22.] Therefore, the report is not hearsay under Fed. R.
Evid. 801(d)(2)(B) as well as under Fed. R. Evid. 801(d)(2)(D).

1 DeMarini Sports, Inc. v. Worth, Inc., 239 F.3d 1314, 1330-34 (Fed. Cir. 2001)
2 (same).

3 A determination of patent infringement requires that every claim limitation or
4 its equivalent be found in the accused product or method. Warner-Jenkinson Co. v.
5 Hilton Davis Chem. Co., 520 U.S. 17, 29, 117 S. Ct. 1040 (1997); Pennwalt Corp. v.
6 Durand-Wayland, Inc., 833 F.2d 931, 935 (Fed. Cir. 1987) (en banc) (citation
7 omitted) ("It is...well settled that each element of a claim is material and essential,
8 and that in order for a court to find infringement, the plaintiff must show the presence
9 of every element or its substantial equivalent in the accused device."). A patent claim
10 is only infringed if the accused device embodies every limitation of the claim and,
11 therefore, if even one limitation is not present there can be no infringement. Carroll
12 Touch, Inc. v. Electro Mechanical Systems, Inc., 15 F.3d 1573, 1579 (Fed. Cir.
13 1993).

14 Optima bears the burden of proving infringement by a preponderance of the
15 evidence. Tanabe Seiyaku Co. v. United States Int'l Trade Comm'n, 109 F.3d 726,
16 731 (Fed. Cir. 1997). Moreover, conclusory statements by Optima that a product
17 infringes are insufficient as a matter of law to prove either literal or doctrine-of-
18 equivalents infringement. See TechSearch, 286 F.3d at 1371-72 ("general assertions
19 of facts, general denials, and conclusory statements are insufficient to shoulder the
20 non-movant's burden").

21 **B. Literal Infringement vs. The Doctrine of Equivalents**

22 There are two types of infringement, "literal infringement" and infringement
23 under the "doctrine of equivalents." Literal infringement of a claim occurs when
24 every limitation recited in the claim appears in the accused device, i.e., when "the
25 properly construed claim reads on the accused device exactly." (emphasis added)
26 Amhil Enterprises Ltd. v. Wawa, Inc., 81 F.3d 1554, 1562 (Fed. Cir. 1996). Under
27 the "doctrine of equivalents," a claim limitation that is not literally present may be
28 found to be "equivalently present" in an accused product "if only 'insubstantial

1 differences' distinguish the missing claim element from the corresponding aspects of
2 the accused [product]." Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1423
3 (Fed. Cir. 1997) (citation omitted). Stated another way, infringement under the
4 doctrine of equivalents occurs when a claimed limitation and the accused product
5 perform substantially the same function in substantially the same way to obtain
6 substantially the same result. Business Objects, S.A. v. Microstrategy, Inc., 393 F.3d
7 1366, 1374 (Fed. Cir. 2005) (citing Warner-Jenkinson, 520 U.S. at 40). This test is
8 often known as the "function-way-result" test for equivalence.

9 Summary judgment of no infringement under the doctrine of equivalents is
10 entirely appropriate and has often been affirmed by the Federal Circuit. "Although
11 equivalence is a factual matter normally reserved for a fact finder, the trial court
12 should grant summary judgment in any case where no reasonable fact finder could
13 find equivalence." Sage Prods., 126 F.3d at 1423. The Supreme Court has also made
14 it clear that "[w]here the evidence is such that no reasonable jury could determine two
15 elements to be equivalent, district courts are obliged to grant partial or complete
16 summary judgment." Warner-Jenkinson, 520 U.S. at 40 n.8.

17 "[T]he determination of infringement under the doctrine of equivalents is
18 limited by two primary legal doctrines: (1) prosecution history estoppel and (2) the
19 'all elements' rule." Lockheed Martin Corp. v. Space Sys./Loral, Inc., 324 F.3d 1308,
20 1318 (Fed. Cir. 2003) (citations omitted). The application of these doctrines is a
21 question of law. Id.

22 Prosecution history estoppel prevents a patentee from trying to recapture
23 subject matter that he gave up during prosecution in order to secure allowance of the
24 patent application: "When the patentee responds to the [Patent Office's] rejection by
25 narrowing his claims, this prosecution history estops him from later arguing that the
26 subject matter covered by the original, broader claim was nothing more than an
27 equivalent." Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., 535 U.S.
28 722, 727, 122 S. Ct. 1831, 1835 (2002). Prosecution history estoppel applies

1 regardless of whether the patentee started with a broad claim and then amended it or
2 simply presented two sets of broad and narrow claims to the Patent Office and then
3 cancelled the broad claims in response to a rejection by the Patent Office. Honeywell
4 International Inc. v. Hamilton Sundstrand Corp., 370 F.3d 1131, 1142 n.8 (Fed. Cir.
5 2004). The patentee bears the burden of proving that he did not surrender the
6 equivalent in question. Festo, 535 U.S. at 740, 122 S. Ct. at 1842 ("Just as *Warner-*
7 *Jenkinson* held that the patentee bears the burden of proving that an amendment was
8 not made for a reason that would give rise to estoppel, we hold here that the patentee
9 should bear the burden of showing that the amendment does not surrender the
10 particular equivalent in question.").

11 "[T]he 'all elements rule' provides that the doctrine of equivalents does not
12 apply if applying the doctrine would vitiate an entire claim limitation." Asyst Techs.,
13 Inc. v. Emtrak, Inc., 402 F.3d 1188, 1195 (Fed. Cir. 2005). "[U]nder the particular
14 facts of a case, if prosecution history estoppel would apply or if a theory of
15 equivalence would entirely vitiate a particular claim element, partial or complete
16 judgment should be rendered by the court, as there would be no further *material* issue
17 for the jury to resolve." Warner-Jenkinson, 520 U.S. at 40 n.8 (emphasis in original).
18 Accordingly, the Federal Circuit has routinely affirmed summary judgments under
19 this theory. See, e.g., Seachange Int'l, Inc. v. C-COR, Inc., 413 F.3d 1361, 1378
20 (Fed. Cir. 2005); Hoffer v. Microsoft Corp., 405 F.3d 1326, 1330 (Fed. Cir. 2005).

21 **IV. ARGUMENT**

22 Although any data recorded on a CD occupies a track, *nothing* in a UDF file
23 system records any information about the locations of tracks, period. [Compton Decl.
24 Ex. H (Fry Depo.) at 101:5-21, 207:7-9; Declaration of Arnold Jones ("Jones Decl.,"
25 filed herewith) ¶ 6.] Even the pre-suit report Optima commissioned from an
26 independent consulting firm confirms that "[t]rack locations are not recorded in
27 elements of the UDF structure or elsewhere in the program area." [Compton Decl.
28 Ex. J (Media Sciences Report) at 8 (emphasis added).] Because the accused software

1 products cannot, under any theory of infringement, satisfy the step of "writing a track
2 information map" as recited in independent claims 1 and 5, Defendants do not
3 infringe any claim of the '531 patent. See Wahpeton Canvas Co., Inc. v. Frontier,
4 Inc., 870 F.2d 1546, 1553 (Fed. Cir. 1989) ("It is axiomatic that dependent claims
5 cannot be found infringed unless the claims from which they depend have been found
6 to have been infringed.").

7 **A. Defendants Do Not Literally Infringe The '531 Patent As a Matter**
8 **of Law**

9 The accused software never writes or creates any data structure that contains
10 the start or end addresses of every track on the CD. In addition, the Court's claim
11 construction requires that a track information be located "on the last user data blocks
12 of the last packet of the track." [Compton Decl. Ex. C (*Markman* Order) at 17.]
13 There is no dispute that, in a UDF 1.50 file system, the only data structure that can
14 occupy that location is a "VAT ICB," which does not contain any information
15 regarding tracks.

16 **1. The "VAT ICB" – the Only Data Structure Stored At the End**
17 **of a UDF Track – Does Not Contain the Start Address of Any**
18 **Track, or the End Address of Every Track.**

19 In accordance with the UDF 1.50 standard, the accused software always writes
20 a VAT ICB in the last block of each UDF track on the disc, the location that, under
21 the Court's construction of the '531 claims, must be occupied by the "track
22 information map." [Compton Decl. Ex. I (UDF Specification) at 26, § 2.2.10;
23 Compton Decl. Ex. H (Fry Depo.) at 164:5-9; Jones Decl. ¶ 12; Compton Decl Ex. C
24 (*Markman* Order) at 17.]⁶ A VAT ICB, however, cannot be a track information map
25 because it does not contain the start or end address of *any* track on the CD, let alone
26 the start and end addresses of *every* track, as is required of a "track information map."
[Compton Decl. Ex. H (Fry Depo.) at 207:7-9; Jones Decl. ¶ 13.] All a VAT ICB

27 ⁶ As explained later in this brief, a "UDF track" is a track containing a UDF file
28 system. The accused software also writes "ISO 9660 tracks," which are separate
tracks reserved for non-UDF data. [Compton Decl. Ex. G (Tempelmann Depo.) at
265:10-13.]

1 contains is a pointer to the VAT; or, if the VAT is small enough, the VAT may be
2 "embedded" in the same block as the VAT ICB. [Compton Decl. Ex. G
3 (Tempelmann Depo.) at 50:18-51:11; Compton Decl. Ex. I (UDF Specification) at
4 26-28, § 2.2.10 and 49, § 3.3.3; Jones Decl. ¶¶ 12-13.]

5 Like a VAT ICB, a VAT cannot be a track information map because it does not
6 contain a list of start or end addresses for every track. [See, e.g., Compton Decl. Ex.
7 H (Fry Depo.) at 108:5-11.] Apart from including a pointer to the Previous VAT ICB
8 location, a VAT is nothing more than a list of block addresses, the first of which
9 corresponds to virtual block 0; the second to virtual block 1; etc. [Compton Decl. Ex.
10 I (UDF Specification) at 27-28, § 2.2.10; Compton Decl. Ex. H (Fry Depo.) at 54:2-
11 19.] The VAT contains no information about what kinds of data is stored at any of
12 these addresses, and cannot be used to determine whether any address represents the
13 beginning of a track, end of a track, or any particular position in between. [Compton
14 Decl. Ex. H (Fry Depo.) at 47:8-25, 108:22-109:4; Jones Decl. ¶¶ 15, 21.] Thus, even
15 when the VAT is embedded in the VAT ICB, the last block of the UDF track will not
16 contain a data structure that meets the Court's definition of a track information map.
17 [Jones Decl. ¶¶ 13-15.]

18 **2. No UDF Data Structure References the Start or End Block of** 19 **Every UDF Track.**

20 In fact, no UDF data structure written in "the last user data blocks on the last
21 packet of the track" or anywhere else can contain either the start or end address of
22 every UDF track on the disc. [Compton Decl. Ex. H (Fry Depo.) at 101:5-21, 207:7-
23 9; Jones Decl. ¶ 22.] Thus, there can be no data structure, or any combination of data
24 structures, that literally meets the Court's definition of "track information map," since
25 the track information map must contain "the start and end logical block address of
26 every track." [Compton Decl. Ex. C (*Markman* Order) at 17 (emphasis added).]

27 **a. Nothing Points to the Start of Any UDF Track.**

28 It is undisputed that, on CD-R's written by DirectCD or Drag-to-Disc, the first

1 block of any UDF track (the "start address" of that track) will always be occupied by
2 a UDF data structure called the "Anchor Volume Descriptor Pointer" (AVDP).
3 [Compton Decl. Ex. H (Fry Depo.) at 201:21-25, 202:13-25, 204:15-16; Jones Decl.
4 ¶¶ 9-11; Compton Decl. Ex. G (Tempelmann Depo.) at 128:22-129:21; Compton
5 Decl. Ex. J (Media Sciences Report) at 4.] It is also undisputed that *no UDF data*
6 *structure contains the location of an AVDP.* [Compton Decl. Ex. G (Tempelmann
7 Depo.) at 52:11-17, 125:24-126:13, 129:5-130:2; Jones Decl. ¶ 10.] Therefore, it is
8 undisputed that the accused software cannot write any data structure that contains the
9 start address of a UDF track.

10 **b. Nothing Points to the End of Every UDF Track.**

11 Although every UDF track ends with a VAT ICB, and each VAT includes a
12 pointer to the previous VAT ICB, there are at least two reasons why the Previous
13 VAT ICB pointer does not contain the end address of every UDF Track.

14 First, it is undisputed that the accused software writes VAT ICB's not only at
15 the end of UDF tracks, but also at other locations within UDF tracks. [Jones Decl. ¶¶
16 20-21; Compton Decl. Ex. G (Tempelmann Depo.) at 139:7-141:5.] Nothing in the
17 VAT (or any other data structure) indicates whether the previous VAT ICB is at the
18 end of a track or not. [Jones Decl. ¶ 21.] Although chaining backwards through each
19 VAT will occasionally point to a VAT ICB that happens to occupy the last block of a
20 track, there is no way to tell which "Previous VAT ICB Location" fields point to the
21 end of a track and which do not. [Id.]

22 To say that the linked chain of VAT's contains "the end address of every track"
23 would be a fallacy for the same reason that a list of all numbers from 000 through 999
24 cannot be said, in any meaningful sense, to contain tomorrow's lottery number. The
25 list does not attach any significance to any of the three-digit numbers it contains, so it
26 is impossible to identify which of those numbers is tomorrow's winner. Likewise, it
27 is impossible to tell from the chain of VAT's on the disc which "Previous VAT ICB
28 Location" values identify a VAT ICB located at the end of a track.

1 Second, Optima cannot dispute that a UDF file system does not contain any
2 pointer to the VAT ICB that occupies the last recorded block of the most recent UDF
3 track. [Compton Decl. Ex. I (UDF Specification) at 101, § 6.10.1.1; Jones Decl. ¶
4 15.] The most recent VAT ICB is not found using a pointer – there is none – rather,
5 the operating system simply knows to look for it in the last recorded block.
6 [Compton Decl. Ex. I (UDF Specification) at 101, § 6.10.1.1; Jones Decl. ¶¶ 12, 15.]
7 Although the "Previous VAT ICB Location" field of each VAT points to a *previous*
8 VAT ICB, by definition, there is no VAT pointing to the *final* VAT ICB because this
9 VAT ICB is the last block written, and no data structures come after it. [UDF Spec.
10 (Ex. I) at 27-28, § 2.2.10 and 101, § 6.10.1.1.] Since there is no pointer to the VAT
11 ICB at the end of the last UDF track, there can be no data structure, or combination of
12 data structures, that includes the end address of every track.

13 It is therefore beyond dispute that a UDF file system cannot contain any data
14 structure, or data structures, that literally meets the Court's construction of the
15 limitation "track information map," and that the accused software cannot perform the
16 step of "writing a track information map," as required by all the claims of the '531
17 patent.

18 **3. Defendants Also Do Not Infringe Because The Accused**
19 **Products Always Create an "ISO 9660" Track, and No Data**
20 **Structure Provides the Start or End Address for the ISO 9660**
21 **Track.**

21 It is undisputed that whenever DirectCD or Drag-to-Disc creates a UDF file
22 system, it always creates two tracks, one reserved for ISO 9660 data (an "ISO 9660
23 track") and a second in which the UDF file system is written (a "UDF track").
24 [Compton Decl. Ex. G (Tempelmann Depo.) at 54:5-13, 55:19-56:18; Compton Decl.
25 Ex. H (Fry Depo.) at 202:19-25; Jones Decl. ¶¶ 7-9.] The ISO 9660 track will always
26 be the first track in a session; the UDF track will always be the second. [Compton
27 Decl. Ex. G (Tempelmann Depo.) at 56:15-18; Compton Decl. Ex. H (Fry Depo.) at
28 202:19-21; Jones Decl. ¶¶ 8-9.] Thus, on a CD-R that contains a single session,

1 Track 1 will always be an ISO 9660 track, and Track 2 will always be a UDF track.
2 [Compton Decl. Ex. G (Tempelmann Depo.) at 56:15-18, 59:13-16; Compton Decl.
3 Ex. H (Fry Depo.) at 202:19-25; Jones Decl. ¶¶ 8-9.]

4 The purpose of the ISO 9660 track is to store information that allows a disc
5 written as a UDF file system to be read by older CD-ROM drives that are only ISO
6 9660-compatible. [Compton Decl. Ex. H (Fry Depo.) at 208:21-209:10.] It differs
7 from the UDF track in that it plays no part in the incremental writing of data to the
8 disc; rather, information is written to the ISO 9660 track only at the end of a
9 recording session, when the user may opt to make the disc compatible with ISO 9660
10 drives. [Id.] It is further undisputed that, in the first session on a CD-R written by
11 DirectCD or Drag-to-Disc, Track 1 will always begin at block 0, and Track 2 will
12 always begin at block 512. [Compton Decl. Ex. H (Fry Depo.) at 189:13-18, 190:23-
13 191:4, 192:10-12, 204:12-16; Compton Decl. Ex. G (Tempelmann Depo.) at 127:8-
14 128:21; Jones Decl. ¶ 11; Compton Decl. Ex. J (Media Sciences Report) at 4.]
15 Subsequent recording sessions also write two tracks, the first being the ISO 9660
16 track for that session and the second being the UDF Track. [Compton Decl. Ex. H
17 (Fry Depo.) at 202:19-25; Jones Decl. ¶¶ 7-9.]

18 Thus, a "track information map" of any DirectCD or Drag-to-Disc CD-R would
19 have to include at least two tracks, and at least the following information for those
20 two tracks:

Track	Start Address of Track	End Address of Track
1	0	(end address of Track 1)
2	512	(end address of Track 2)

21 It is undisputed that no UDF data structure references the start of an ISO 9660
22 track. [Compton Decl. Ex. G (Tempelmann Depo.) at 74:17-24; Jones Decl. ¶ 17.]
23 Therefore, it is undisputed that the accused software will never write a UDF data
24 structure that references the start address of Track 1. [Jones Decl. ¶ 17.] Moreover,
25 as explained above, there is no UDF data structure that references the start address of
26
27
28

1 any UDF track, because the first block of a UDF track is always occupied by an
2 AVDP, which nothing points to. [Section IV.A.2.a, supra.] Thus, because the
3 accused software always writes an ISO 9660 track as Track 1, and a UDF track as
4 Track 2, the software *never writes any data structure that contains the start address*
5 *of either Track 1 or Track 2.*

6 Likewise, it is undisputed that the accused software never writes any data
7 structure that references the last block of an ISO 9660 track. [Compton Decl. Ex. G
8 (Tempelmann Depo.) at 57:14-19, 62:14-17; Jones Decl. ¶ 19.] Therefore, it is
9 undisputed that the accused software does not write any data structure that references
10 the end address of Track 1. And, as explained above, there is no UDF data structure
11 that records the location of the last block of the most recent UDF track. [Section
12 IV.A.2.b, supra.] Thus, the accused software *never writes any data structure that*
13 *contains the end address of Track 1 or the end address of the last UDF track.*

14 Thus, there can be no data structure, or any combination of data structures, that
15 literally meets the Court's definition of "track information map," since the track
16 information map must contain "the start and end logical block address of every
17 track." [Compton Decl. Ex. C (*Markman* Order) at 17 (emphasis added); Jones Decl.
18 ¶ 22.] Once again, this fact confirms that the accused software never performs the
19 step of "writing a track information map," so there can be no literal infringement of
20 any claim of the '531 patent.

21 **B. As a Matter of Law, the Accused Software Cannot Infringe the '531**
22 **Patent Under the Doctrine of Equivalents.**

23 Defendants are entitled to summary judgment of no infringement under the
24 doctrine of equivalents for at least three independent reasons: (1) Optima cannot
25 show that the accused products are insubstantially different from the claimed track
26 information map; (2) Optima's theory of equivalence improperly violates the "all
27 elements rule" and would vitiate the "track information map" element of the claims;
28 and (3) prosecution history estoppel bars Optima from relying on the doctrine of
equivalents.

1 **1. Undisputed Facts Establish That No Combination of Data**
2 **Structures in the Accused Products Are Equivalent to a**
3 **"Track Information Map."**

4 Under the "function-way-result" test for equivalence, a claim limitation and a
5 structure in the accused product are equivalent only if they perform substantially the
6 same function in substantially the same way to obtain substantially the same result.
7 Business Objects, 393 F.3d at 1374. Applying this test to the present case,
8 undisputed facts establish that no data structure, or combination of data structures,
9 can be equivalent to a "track information map."

10 For purposes of this motion, the Court may assume as true Optima's
11 contentions that the function of the track information map is "steering of file system
12 references only to the latest version of every file without encountering run-in or run-
13 out blocks," and that the result of that function is "enabling access to the latest
14 version of every file and rendering obsolete and deleted files transparent even though
15 they are still on the CDROM." [Optima's Final Infringement Contentions (Compton
16 Decl. Ex. F) at 4-5.] For the sake of argument, the Court may also assume that some
17 data structure (or combination of data structures) written by the accused software
18 performs substantially that same function to achieve substantially that same result.

19 Even under all of these assumptions, Optima cannot establish infringement
20 under the doctrine of equivalents because no structure or combination of UDF
21 structures operates in substantially the same way as the track information map does.
22 [Jones Decl. ¶ 25.] The Federal Circuit has noted that it is "commonplace" for the
23 claimed and accused devices to perform substantially the same function and achieve
24 substantially the same result, so the determination of "way" will generally be the crux
25 of any doctrine-of-equivalents analysis. See Perkin-Elmer Corp. v. Westinghouse
26 Elec. Corp., 822 F.2d 1528, 1532 n.6 (Fed. Cir. 1987).

27 Optima describes the "way" in which the TIM functions as "pointers to the root
28 directory and the start and end of the latest version of every file." [Compton Decl.
29 Ex. F (Optima's Final Infringement Contentions) at 5.] This assertion makes no

1 sense, since, as the Court's construction recognizes, the pointers contained in the TIM
2 are to "the start and end address of every *track*," not "the start and end of the latest
3 version of every file." Moreover, describing the "way" the TIM functions as
4 containing "pointers" is incomplete and insufficient for purposes of the "function-
5 way-result" test – merely noting that the TIM includes pointers to the start and end of
6 every track does not explain how those pointers are used in a technique for recording
7 CD-R discs.

8 In fact, the correct answer is given in the specification of the '531 patent, which
9 explains that:

10 [A]ny file read operation requested by the user must be converted to
11 the proper user data block on the disc. **The track info map is used to**
12 **perform this conversion.** First, the Recording Technique finds [the]
13 recordable CD track where the logical block address of the start of
14 the requested file resides **by using the track info map track start and**
15 **end logical block address information.** Next, the logical block
16 address of the user data block is calculated by the following equation:

$$\begin{aligned} \text{logical block address} = & \text{Request logical block address} + \\ & ((\text{Request logical block address} - \text{Track Start logical block address}) / \\ & \text{Packet Size}) * 7 \end{aligned}$$

17
18
19 [Compton Decl. Ex. A ('531 patent) at 5:31-42 (emphasis added); see also Fig. 7; col.
20 3:7-9 ("The Recording Technique uses a special equation to correct for the logical
21 block address of the run in and run out blocks when accessing user data blocks in a
22 given packet."); Jones Decl. ¶ 26.] From the patent's discussion of this formula, it is
23 evident that the value of "Track Start logical block address" is obtained by using the
24 track information map to determine which track the requested block occupies, and
25 thus which "Track Start logical block address" is to be used in the formula. As
26 Optima's expert, Mr. Tempelmann, explained:

27 Q. The track information map tells you what the track start address
28 of that block's track is, right?

1 A. Right. Right, right, right. Then you use a formula to calculate the
2 relative position inside the track.

3 [Compton Decl. Ex. G (Tempelmann Depo.) at 193:5-10; see also Jones Decl. ¶ 26.]
4 Thus, any alleged equivalent to a "track information map" must work in substantially
5 the same way, that is, by some method in which "track start logical block address"
6 information is used to compute the address on the disc where a requested block
7 number is stored.

8 As a preliminary matter, it is undisputed that the accused software cannot use,
9 and does not use, the formula stated in the '531 patent. For the formula to work, the
10 value "Packet Size" must be constant across the whole disc; that is, the disc must be
11 written with fixed-length, rather than variable-length, packets. [Compton Decl. Ex. A
12 ('531 patent) at 3:9-11 ("Only the fixed type of packet will be used when describing
13 the Recording Technique."), 4:56-57 ("All write operations to the CDROM consist of
14 fixed packets."); Compton Decl. Ex. G (Tempelmann Depo.) at 190:7-9, 193:5-15;
15 Jones Decl. ¶ 27.] It is undisputed that DirectCD and Drag-to-Disc write only
16 variable-length packets, and therefore cannot use the formula described in the '531
17 patent. [Compton Decl. Ex. G (Tempelmann Depo.) at 190:7-16; Jones Decl. ¶ 27;
18 Compton Decl. Ex. J (Media Sciences Report) at 2.]

19 More importantly, as explained above, it is undisputed that no UDF data
20 structure, or combination of structures, include pointers to the start address of every
21 track, or to the end address of every track. [Section IV.A.2, supra.] Because nothing
22 in a UDF file system records these addresses, there is simply no way any UDF data
23 structure can identify where each track on the disc begins and ends, or in which track
24 any given block resides. Thus, no matter how Optima may characterize the "way" in
25 which some purported equivalent functions in the accused products, that way will in
26 fact be substantially different from the way in which a track information map
27 functions, because UDF file systems do not record or utilize any information about
28 "tracks" for any purpose. [Compton Decl. Ex. H (Fry Depo.) at 101:5-21, 207:7-9;

1 Compton Decl. Ex. J (Media Sciences Report) at 8.]

2 **2. Asserting that a File System Without a Track Information**
3 **Map is Equivalent to a File System With One Would Violate**
4 **the All-Elements Rule.**

5 The "all elements rule" provides that the doctrine of equivalents cannot be
6 invoked when applying it would vitiate an entire claim limitation. Asyst, 402 F.3d at
7 1195. Likewise, the doctrine cannot be used "to erase 'meaningful structural and
8 functional limitations of the claim on which the public is entitled to rely in avoiding
9 infringement.'" Conopco, Inc. v. May Dep't Stores Co., 46 F.3d 1556, 1562 (Fed. Cir.
10 1994) (citation omitted). An equivalence argument under which any structure is
11 equivalent to the claimed limitation "is the precise type of overextension of the
12 doctrine of equivalents that the claim vitiation doctrine is intended to prevent."
13 Freedman Seating Co. v. American Seating Co., -- F.3d --, 2005 WL 1903786 at *11
14 (Fed. Cir. Aug. 11, 2005) (Ex. L).

15 Any technique for recording CD-R's that makes the write-once disc appear to
16 the operating system as a rewritable disc must, upon any update of the disc, write
17 some data structure to keep track of which files are current and which have been
18 rendered obsolete by modification or deletion. In the technique of the '531 patent,
19 that structure is the "track information map," which, under the Court's construction,
20 must include "the start and end logical block address of every track." [Compton
21 Decl. Ex. C (*Markman* Order) at 17.]

22 Because no UDF data structures disclose where tracks begin and end [Compton
23 Decl. Ex. H (Fry Depo.) at 101:5-21, 207:7-9; Jones Decl. ¶ 22] – or, for that matter,
24 *any* information about tracks [Media Sciences Report (Ex. J) at 8] – to say that some
25 UDF data structure, or combination of UDF data structures, is equivalent to a "track
26 information map" would vitiate the requirement that the track information map, or its
27 equivalent, contain some information regarding "tracks." See Seachange, 413 F.3d at
28 1378 (when claim was construed to require "direct, point-to-point" interconnections,
argument that "indirect interconnection" was equivalent vitiated "point-to-point"

1 requirement). In other words, the limitation of "writing a track information map,"
2 which represents Optima's particular solution to the problem of incremental CD-R
3 recording, cannot be rendered superfluous by expanding it to cover any solution for
4 indexing which data on the disc is current, and which data has been superseded. See
5 Freedman, 2005 WL 1903786 at *11 (Compton Decl. Ex. L).

6 Thus, the all-elements rule establishes as a matter of law that nothing in a UDF
7 file system can be equivalent to a "track information map."

8 **3. Prosecution History Estoppel Prevents Optima From**
9 **Claiming any Range of Equivalents for the Limitation "Track**
10 **Information Map."**

11 The Federal Circuit has stated that there is no difference between the situation
12 where a claim is amended to secure allowance and one where the patent applicant
13 submits a limited claim and a broader claim, then cancels the broader one when it has
14 been rejected. Honeywell, 370 F.3d at 1142 n.8 (citation omitted). Both situations
15 give rise to prosecution history estoppel, because whether the applicant amends the
16 claim or assents to its cancellation, the applicant "has abandoned it as it stood." Id.

17 In its original application for the '531 patent, Optima included eight claims that
18 included the limitation "writing a track information map" and one, original claim 5,⁷
19 that did not:

20 5. In an operating system connected to a recordable CDROM, said
21 operating system having a working directory identifying the contents
22 of the CDROM being stored on an updatable memory system, the
23 working directory including the location on the CDROM of a last
24 revision of any piece of data, the location of any prior revisions of
25 said data being transparent to the operating system.

26 [Compton Decl. Ex. M (Original '531 Application) at 14.] The "operating system"
27 described in original claim 5 is, in all relevant respects, the same as the "method for
28

⁷ Issued claim 5 was actually original claim 6 in the patent application.

1 entering new information on a recordable CDROM" in issued claim 1, minus the
2 limitation of "writing a track information map" as shown in the chart below:

Original Claim 5	Issued Claim 1
3 4 Describes "an <i>operating system</i> 5 connected to a <i>recordable CDROM</i> ." 6 7	Describes "a method for entering new information on a <i>recordable CDROM</i> operatively connected [to] an <i>operating</i> 8 <i>system</i> ."
9 States that the operating system has 10 "a <i>working directory identifying the</i> 11 <i>contents of the CDROM</i> being stored 12 on an <i>updateable memory system</i> ." 13	Describes "opening a directory in an <i>updateable memory being identifiable with</i> 14 <i>a directory on a CDROM</i> , said directory 15 in the updateable memory constituting a 16 <i>working directory</i> ."
17 States that the working directory 18 includes "the <i>location on the</i> 19 <i>CDROM of the last revision of any</i> 20 <i>piece of data</i> , the location of any 21 prior revisions of such data being 22 <i>transparent to the operating system</i> ."	23 States that "an operating system accessing 24 data stored on the CDROM is routed by 25 the working directory directly to the <i>latest</i> 26 <i>revision of such data stored on the</i> 27 <i>CDROM</i> , any previous versions of said 28 data which are still present on the CDROM being <i>transparent to the</i> <i>operating system</i> ."

23 In the Patent Office's first response to Optima, all of the proposed claims were
24 allowed except original claim 5, which, the Examiner explained, was anticipated
25 under 35 U.S.C. § 102 by two earlier patents. [Compton Decl. Ex. N (Office Action)
26 at 2.] With regard to the allowed claims, the Examiner stated:

27 The following is an examiner's statement of reasons for
28 allowance: The prior art of record did not disclose, make

1 obvious, nor fairly suggest the step of writing Applicant's
2 track information map in conjunction with the other
3 limitations of the independent claims 1 and 6.

4 [Id. at 3.]

5 Optima responded to the Examiner's office action by cancelling original claim
6 5. [Compton Decl. Ex. O (Office Action Response) at 2.] Optima never challenged
7 or otherwise responded to the Examiner's reasons for allowing the other claims.

8 Because issued claim 1 is essentially identical to original claim 5 plus the step
9 of "writing a track of information map," and Optima cancelled original claim 5 to
10 obtain allowance of the other claims, prosecution history estoppel prevents Optima
11 from recapturing any of the "territory" it surrendered by cancelling original claim 5.
12 Festo, 535 U.S. at 736-37, 122 S. Ct. at 1840; Festo, 344 F.3d 1359 at 1365. By
13 cancelling the only claim that omitted the limitation of "track information map,"
14 Optima surrendered *all* the territory between that claim and issued claim 1, the
15 broadest of the remaining claims. Thus, Optima surrendered the ability to claim that
16 a data structure that is not literally a "track information map" can nonetheless be
17 equivalent because any such structure would lie within the "surrendered territory."
18 See Honeywell, 370 F.3d at 1142 n.8.

19 These facts give rise to a presumption of prosecution history estoppel, and the
20 burden shifts to Optima to rebut that presumption by showing one of three
21 circumstances: (1) that the elements now alleged as equivalents were "unforeseeable
22 at the time of the amendment and thus beyond a fair interpretation of what was
23 surrendered"; (2) that "the rationale underlying the narrowing amendment [bore] no
24 more than a tangential relation to the equivalent in question"; or (3) there is "some
25 other reason why the patentee could not reasonably be expected to have described the
26 insubstantial substitute in question." Festo, 344 F.3d at 1369-70 (citing Festo, 535
27 U.S. at 740-41, 122 S. Ct. at 1842). No exception can apply here because (1) a "fair
28 interpretation of what was surrendered" would include all potential equivalents; (2)

1 the narrowing amendment directly pertained to the limitation of "track information
2 map," since that limitation is the only substantial difference between original claim 5
3 and issued claim 1; and (3) there can be no other reason, "such as the shortcomings of
4 language, why the patentee was prevented from describing the alleged equivalent
5 when it narrowed the claim." Festo, 344 F.3d at 1370. The question of whether any
6 Festo exception applies is a matter of law, and can be resolved in deciding a motion
7 for summary judgment of non-infringement. Biagro Western Sales, Inc. v. Grow
8 More, Inc., -- F.3d --, 2005 WL 2207685 at *8 (Fed. Cir. Sep. 13, 2005) (Compton
9 Decl. Ex. P).

10 **C. There Can Be No Literal or Doctrine-Of-Equivalents Infringement**
11 **Because the Operating System is Never Routed "Directly" to File**
12 **Data.**

12 Finally, there can be no infringement of the '531 patent for an entirely
13 independent reason. Claims 1 and 5 both require that "an operating system accessing
14 data stored [or information] on the CDROM is routed by the working directory
15 **directly** to the latest revision of such data [or information] on the CDROM." [Col.
16 6:20-22, 6:65-67 (emphasis added).] The accused software cannot satisfy this
17 limitation because, indisputably, a UDF file system cannot route the operating system
18 **directly** to the latest revision of the file data.

19 As discussed above (supra at 5-6), a UDF file system only references file data
20 through "indirection," that is, through a chain of pointers. [Compton Decl. Ex. G
21 (Tempelmann Depo.) at 51:16-52:23; Compton Decl. Ex. I (UDF Specification) at
22 27, § 2.2.10; Jones Decl. ¶ 28.] To access the file data, the operating system must
23 first read the "File Entry" record for that file, which in turn directs the operating
24 system to each "extent" of data that represents a part of the complete file. [Compton
25 Decl. Ex. I (UDF Specification) at 49, §3.3.3; Compton Decl. Ex. H (Fry Depo.) at
26 98:1-23; Jones Decl. ¶¶ 28-29.] The File Entry, likewise, is found through
27 indirection; it is referenced by the file's File Identifier Descriptor (FID), which is
28 contained in a directory structure. [Compton Decl. Ex. I (UDF Specification) at 46, §

1 3.3.1; Compton Decl. Ex. H (Fry Depo.) at 41:11-24, 59:18-60:6.]

2 Any use of the Virtual Allocation Table also involves "indirection." [Compton
3 Decl. Ex. I (UDF Specification) at 27, § 2.2.10 ("The Virtual Allocation Table is used
4 to *redirect* requests for certain information to the proper logical location. The
5 *indirection* provided by this table provides the appearance of direct overwrite
6 capability.") (emphasis added); Compton Decl. Ex. H (Fry Depo.) at 47:8-19 ("You
7 indirectly use the VAT simply to look up a block location."); Compton Decl. Ex. G
8 (Tempelmann Depo.) at 38:13-24 (VAT entries point to File Entries "indirectly");
9 Jones Decl. ¶ 28.] Thus, even if the accused software were found to write a "track
10 information map," using that TIM to locate data would necessarily involve
11 indirection, and the requirement that the operating system be routed "**directly** to the
12 latest revision of the data" would not be met.


13 Moreover, accessing data through indirection can never be equivalent to
14 accessing data "directly," since the two terms are opposites of each other. Opposites
15 can never be equivalents of each other. See, e.g., Asyst, 402 F.3d at 1195
16 ("unmounted" cannot be equivalent to "mounted"); Cooper Cameron Corp. v.
17 Kvaerner Oilfield Prods., Inc., 291 F.3d 1317, 1322 (Fed. Cir. 2002) ("above" cannot
18 be equivalent to "between"); Moore, U.S.A., Inc. v. Standard Register Co., 229 F.3d
19 1091, 1106 (Fed. Cir. 2000) ("minority" cannot be equivalent to "majority"). Thus,
20 as a matter of law, Optima cannot rely on the doctrine of equivalents to satisfy the
21 limitation of "directly" routing the operating system to the latest revision of the data.

22 V. CONCLUSION

23 For the foregoing reasons, Defendants' motion for summary judgment of non-
24 infringement should be granted.

25 Dated: September 15, 2005

FISH & RICHARDSON P.C.

27 By: 
28 David M. Barkan
Attorneys for Defendants
Napster and Sonic Solutions