MARTIN L. FINEMAN (CA State Bar No. 104413)
DAVIS WRIGHT TREMAINE LLP
505 Montgomery Street, Suite 800
San Francisco, California 94111
Telephone: (415) 276-6500
Facsimile: (415) 276-6599
Email: martinfineman@dwt.com

MARTIN B. PAVANE (Admitted *Pro Hac Vice*)
LISA A. FERRARI (Admitted *Pro Hac Vice*)
COZEN O'CONNOR
277 Park Avenue
New York, NY 10172
Telephone: (212) 883-4900
Facsimile: (212) 986-0604
Email: mpavane@cozen.com
Email: lferrari@cozen.com

Attorneys for Plaintiff
Emblaze Ltd.

UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

EMBLAZE LTD.,

Plaintiff,

v.

APPLE INC., a California Corporation,

Defendant.

CASE NO. 4:11-CV-01079 SBA

EMBLAZE LTD.'S OPENING CLAIM CONSTRUCTION BRIEF

Date: October 31, 2012
Time: 9:00 a.m.
Courtroom: 1

Before The Honorable Saundra Brown Armstrong

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

CASES

STATUTES

Pursuant to Patent L. R. 4-5 and Order Concerning September 15, 2011 Case Management Conference (D.E. 68), this is Plaintiff Emblaze Ltd.'s ("Emblaze") opening brief in support of its proposed construction of the disputed claim terms of U.S. Patent No. 6,389,473 ("'473 Patent"). Also submitted herewith in support of Emblaze's proposed constructions is the Declaration of Lisa Ferrari with Exhibits 1-3.

I. THE '473 PATENT

On May 14, 2002, the '473 Patent (Ex. 1)1 issued from U.S. Patent Application Serial No. 09/275,703 ("the '703 application"), which claims priority to a foreign application filed on March 24, 1998.

II. THE LAW OF CLAIM CONSTRUCTION

1. Methodology

Claim construction is a question of law exclusively for the court. *See Markman v. Westview Instrum., Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996). In construing a claim, the Court first looks to the intrinsic evidence of record, *i.e.*, the patent, including the claims and the specification, and the prosecution history. *See, id.*

A claim construction analysis begins by considering the language of the claims. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996); *Rapoport v. Dement*, 254 F.3d 1053, 1059 (Fed. Cir. 2001) (the court turns first to the claims themselves, in order to determine whether there is anything in their language which limits their reach). "[T]he claims define the scope of the right to exclude; the claim construction inquiry, therefore, begins and ends in all cases with the actual words of the claim." *Renishaw PLC v. Marposs Societa' Per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998).

[1] All exhibits referenced herein are attached to the Declaration of Lisa Ferrari.

"The words used in the claims are interpreted in light of the intrinsic evidence of record, including the written description, the drawings, and the prosecution history, if in evidence." *Teleflex, Inc. v. Ficosa North America Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002); *see Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1327 (Fed. Cir. 2009); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314, 1315 (Fed. Cir. 2005) (*en banc*).

"[C]laim terms take on their ordinary and accustomed meanings unless the patentee demonstrated an intent to deviate from the ordinary and accustomed meaning of a claim term by redefining the term or by characterizing the invention in the intrinsic record using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *Teleflex, Inc.*, 299 F.3d at 1327; *see SciMed Life Sys., Inc. v. Adv. Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1344 (Fed. Cir. 2001). "We indulge a 'heavy presumption' that a claim term carries its ordinary and customary meaning." *Teleflex, Inc.*, 299 F.3d at 1325, quoting *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002).

Because the claims define the scope of the right to exclude, it is improper to import a limitation from the specification into the claims. *See Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1331 (Fed. Cir. 2004) ("While claims must be construed in light of the specification, limitations from the specification are not to be read into the claims, for it is the claims that measure the invention.") (internal quotation marks and citations omitted).

"Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using 'words or expressions of manifest exclusion or restriction.'" *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004); *see ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1091 (Fed. Cir. 2003). The Federal Circuit "has expressly rejected the contention that if a

patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment." *Liebel-Flarsheim Co.,* 358 F.3d at 906.

2. Extrinsic evidence

Courts may rely on extrinsic evidence -- *i.e.*, evidence beyond the intrinsic evidence -- but such evidence is "less significant than the intrinsic record in determining the legally operative meaning of claim language." *Netcraft Corp. v. eBay, Inc.*, 549 F.3d 1394, 1397 (Fed. Cir. 2008) (citation omitted); see *Phillips*, 415 F.3d at 1318, 1324. Moreover, when an analysis of the intrinsic evidence alone resolves any ambiguity in a disputed claim term, reliance on extrinsic evidence is improper. *See CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1153 (Fed. Cir. 1997); *Vitronics Corp.*, 90 F.3d at 1582, 1583.

Within the class of extrinsic evidence, the Federal Circuit has observed that dictionaries and treatises can be useful in claim construction. *See Renishaw PLC*, 158 F.3d at 1250; *ERBE Elektromedizin GmbH v. ITC*, 566 F.3d 1028, 1036 (Fed. Cir. 2009)

3. Words of approximation

"[W]ords of approximation, such as 'generally' and 'substantially,' are descriptive terms commonly used in patent claims to avoid a strict numerical boundary to the specified parameter." *Anchor Wall Systems, Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1310-1 (Fed. Cir. 2003) (internal quotations omitted); *see also, Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1369 (Fed. Cir. 2001) ("In view of the foregoing, *i.e.*, the claim language, written description, and prosecution history, we presume that 'substantially uniform' as related to the 'alkaline detergent cast' means what it says, 'largely, but not wholly the same in form.'"). Similarly, in *Anchor Wall Systems, Inc.*, 340 F.3d at 1311 the Federal Circuit held that "'generally parallel' envisions some amount of deviation from exactly parallel", *id.* at 1311, observing that terms such as "substantially equal" are "ubiquitously used in patent claims and . . . such usages, when serving reasonably to

describe the claimed subject matter to those of skill in the field of the invention and to distinguish the claimed subject matter from the prior art, have been accepted in patent examination and upheld by the courts". *Id.* (citing *Andrew Corp. v. Gabriel Elecs. Inc.*, 847 F.2d 819, 821-22 (Fed. Cir. 1988)).

4. "Comprising"

"The word 'comprising' transitioning from the preamble to the body [of the claim] signals that the entire claim is presumptively open-ended." *Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367 at 1371 (Fed. Cir. 2005). "[T]he transition 'comprising' creates a presumption that the recited elements are only a part of the device, that the claim does not exclude additional, unrecited elements." *Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1348 (Fed. Cir. 2001), citing *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2002). "'Comprising' is a term of art used in claim language which means that the named elements are essential, but other elements may be added, and still form a construct within the scope of the claim." *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501 (Fed. Cir. 1997).

5. "A" means one or more

In *Elkay Manufacturing Co. v. Ebco Manufacturing Co.*, 192 F.3d 973, 977 (Fed. Cir. 1999), the Federal Circuit rejected Ebco's contention that the normal, accepted meaning of "a" and "an" requires that the disputed limitation be construed as describing a single feed tube with a single path for both air and water. "While the article 'a' or 'an' may suggest 'one,' our cases emphasize that 'a' or 'an' can mean 'one' or 'more than one,' depending on the context in which the article is used." When a claim includes the open-ended transitional word "comprising", "a" is generally understood to mean "one or more". *Id.*, citing *Abtox, Inc. v. Exitron Corp.*, 122 F.3d 1019, 1023 (Fed. Cir. 1997) ("The article 'a' suggests a single chamber. However, patent claim parlance also recognizes that an article can carry the meaning of 'one or more,' for example in a claim using the transitional

phrase 'comprising.'") (citing *North Am. Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 1575-76 (Fed. Cir. 1993)).

6. Multiple appearances of same term in a claim

A term in a patent claim may be first referred to as "a ...", which provides an "antecedent basis" for the term. Thereafter, the term may be referred to by reference to its antecedent basis, such as, "the . . ." or "said . . .," and the meaning of the term remains the same. *See Sandisk Corp. v. Memorex Products, Inc.*, 415 F.3d 1278, 1284-5 (Fed. Cir. 2005). However, the "patentee's mere use of a term with an antecedent does not require that both terms have the same meaning." *Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008). As explained in *Microprocessor*, "'condition code' as used in claims 1 and 7 is not surrounded by uniform language that requires a single interpretation of the term". *Id.* at 1376. *See also, Epcon Gas Sys., Inc. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1031 (Fed. Cir. 2002) (construing "substantially" as having two different meanings based on its use in "two contexts with a subtle but significant difference").

7. Claim differentiation

The doctrine of claim differentiation assumes that two claims in the same patent will not have an identical scope and should be construed to give effect to the difference in scope indicated by a difference in language. *Ecolab Inc. v. Paraclipse, Inc.*, 285 F.3d 1362, 1375-76 (Fed. Cir. 2002) (citing *Intermatic Inc. v. Lamson & Sessions Co.*, 273 F.3d 1355, 1364 (Fed. Cir. 2001)).

"Differences among claims can . . . be a useful guide in understanding the meaning of particular claim terms." *Phillips*, 415 F.3d at 1314. "For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id.* at 1314-1315; *see also Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1347-48 (Fed. Cir. 2009).

8. The order of steps in a method claim

There is a two-part test for determining if the steps of a method claim must be performed in the order in which they are written. First, courts must look to the claim language to determine if, as a matter of logic or grammar, they must be performed in the order written. If not, the courts next look to the rest of the specification to determine whether it directly or implicitly requires such a narrow construction. If not, the sequence in which such steps are written does not require that they be performed in that order. *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369-1371 (Fed. Cir. 2003).

Even where the specification discusses only a single embodiment, it is improper to read a specific order of steps into a method claim where, as a matter of logic or grammar, the claim language does not impose a specific order on the performance of the steps, and the specification does not directly or implicitly require a particular order. *Altiris, Inc.*, 318 F.3d at 1371.

Where a method claim does not require any particular order of steps, it covers the steps performed in any order or simultaneously. *Altiris, Inc.*, 318 F.3d at 1371.

9. Indefiniteness, 35 U.S.C. § 112, ¶ 2

"A claim is considered indefinite if it does not reasonably apprise those skilled in the art of its scope." *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1383-84 (Fed. Cir. 2005). "Because a claim is presumed to be valid, a claim is indefinite only if the 'claim is insolubly ambiguous, and no narrowing construction can properly be adopted.'" *Honeywell Int'l, Inc. v. Int'l Trade Comm'n*, 341 F.3d 1332, 1338-9 (Fed. Cir. 2003) (quoting *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001)). Therefore, "[a] claim that is amenable to construction is not invalid on the ground of indefiniteness." *Energizer Holdings, Inc. v. Int'l Trade Comm'n*, 435 F.3d 1366, 1371 (Fed. Cir. 2006); *Microprocessor Enhancement Corp.*, 520 F.3d at 1375 (holding asserted claims not indefinite). Indefiniteness, like other invalidity defenses, must be

proved by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238, 2251-2 (2011).

10. Invalidity based on a lack of written description or enablement should not be heard during Markman Proceedings

Alleged invalidity of patent claims for failure to meet the written description and enablement requirements of 35 U.S.C. § 112, ¶ 1 should not be addressed during a *Markman* proceeding, but rather are properly considered after the claims have been construed. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1380 (Fed. Cir. 2007); *Phillips*, 415 F.3d at 1327.[2]

III. ARGUMENT

The disputed claim terms are addressed below in the order they appear in the Joint Claim Construction and Prehearing Statement (DE 97) ("JCCPS").

1. real-time broadcasting [Claims 1, 25]

"Real-time broadcasting" should be construed to mean "a broadcast data stream that is received at one or more clients without substantial delay after the broadcast." JCCPS, Ex. A, p. 3. Emblaze's construction is consistent with the ordinary meaning of the claim term, and is supported by the patent specification (e.g., "Clients [*i.e.*, users] 30 connect to server 36 and receive the multimedia sequence, substantially in real time" (7:4-5)[3]; "When one of [client] computers 30 connects to server 36 and begins to download the data stream, it first reads the index file in order to identify at what point in stream 40 to begin and to start receiving the data stream substantially in real time, preferably with only a minimal lag, as it is transmitted from computer 34" (8:1-7).

Apple's proposed construction is "communicating a data stream that is received at one or more clients simultaneously with minimal delay." JCCPS, Ex. A, p. 3. Apple's construction

[2] Indeed, whether the written description requirement is satisfied is an issue of fact, not law. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010).

[3] Citations to the '473 Patent are in the form "column:line".

improperly requires that the broadcast be "simultaneously" received by clients, although there is no such limitation in the claim language. The claim says nothing about client computers simultaneously receiving the broadcast. Apple acknowledges that the specification, in describing when clients receive the broadcast, consistently uses the terms "substantially in real time" (7:5, 8:5) and "preferably, with only a minimal lag" (8:6). JCCPS, Ex. A, pp. 3-4. Thus, the specification allows for some variation in time of receipt of the broadcast by different clients.

Apple cites a discussion of the prior art in the "Background of the Invention" of the '473 Patent, which states: "In network broadcasting, data are transmitted over a network in real time from a single transmitting computer to a plurality of clients simultaneously" (1:15-17). But that passage refers to the broadcast being "transmitted" simultaneously, not being "received" simultaneously (emphasis added). That passage is also inapplicable because it describes the prior art, not the invention of the '473 Patent. In any event, it is improper to import a limitation from the specification into the claim unless the specification uses "words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *Teleflex, Inc.*, 299 F.3d at 1327. With respect to real-time broadcasting, there is no such clear disavowal of claim scope in the specification or prosecution history of the '473 Patent. Nowhere in the specification is the broadcast described as, or required to be, "simultaneously" received by clients.

Apple's proposed construction also improperly redefines "broadcasting" as "communicating". While broadcasting certainly encompasses "communicating", its ordinary meaning also includes "transmitting." *See* 8:1-7 ("When one of [client] computers 30 connects to server 36 and begins to download the data stream, . . . to start receiving the data stream substantially in real time, preferably with only a minimal lag, as it is transmitted from computer 34 .") (emphasis added). The word "broadcasting" is widely used and well-understood, and there is no basis or reason to depart from its ordinary meaning.

Apple's construction also improperly restricts the term "real-time broadcasting" to the preferred embodiment of broadcasting with "minimal delay" (8:5-6; "preferably with only a minimal lag"), but there is no basis for restricting claim 1 to the preferred embodiment. Emblaze's proposed construction is not limited to the preferred embodiment and instead uses the term "without substantial delay", which is supported by the specification. *See* 2:20-21 ("allows the broadcast to go on substantially in real time without the use of special-purpose hardware") (emphasis added). *See Anchor Wall Systems, Inc.*, 340 F.3d at 1310-1 (internal quotations omitted) ("[W]ords of approximation, such as 'generally' and 'substantially,' are descriptive terms commonly used in patent claims to avoid a strict numerical boundary to the specified parameter.").

2. providing at the transmitting computer a data stream having a given data rate [Claim 1]

This claim term should be considered in its entirety since that is how it appears in the claim. Emblaze's proposed construction is: "providing from the transmitting computer a data stream having an assigned data rate, where a data rate is an amount of data per unit of time." JCCPS, Ex. A, p. 9.

Emblaze's construction is consistent with the ordinary meaning of the claim term, and is supported by the patent specification, e.g., "[T]he data stream [is] . . . generated by the transmitting computer 34" (2:31-32); "Computer [34] is preferably equipped with suitable software for preparing and compressing the multimedia sequence . . . [T]he computer [34] may typically run . . . standard audio compression software, operating at a sample rate of 8kHz, with 16 bits/sample" (6:63-65); "For example, as shown in FIG. 3A, time intervals [of the slices of the data stream] . . . are not all equal, but rather are adjusted by computer 34 in response to the transmission rate. Alternatively or additionally, the compression level of the data is varied, as is likewise described below, so as to adjust the data streaming rate to the available bandwidth over one or more channels between computer 34 and server 36". (7:42-49); and "[T]he rate of data in stream 40" (9:44-45). As these

passages make clear, the data stream is provided at the transmitting computer and is provided with an assigned data rate.

Apple's proposed construction parses this claim term into two parts:

"providing at the transmitting computer a data stream", which Apple construes as "inputting a data stream to the transmitting computer from a source of broadcast data"; and

"a data stream having a given data rate", which Apple construes as "the speed, as measured in bits per second, at which the data stream is input to the transmitting computer."

The first part of Apple's construction is wrong because it improperly construes the claim term "providing" as "inputting". However, as the patent specification makes clear, the data stream may be generated by the transmitting computer, rather than being "input" to the transmitting computer ("the data stream comprises multimedia data captured or generated by the transmitting computer" (2:29-31, emphasis added); "although data inputs of other types may be generated at or by computer 34 . . ." (6:33-34, emphasis added).

The second part of Apple's construction is also wrong because it ignores the claim term "given." "Given" in the context of "a given data rate" has its ordinary meaning, "assigned," *i.e.*, the data rate is assigned, not random. *See* Ex. 2, Webster's Third New International Dictionary, 1993, p. 960 (definition of "given", "4a definitely stated; fixed, specified").

Apple also incorrectly limits "a given data rate" to "speed, as measured in bits per second, at which the data stream is input to the transmitting computer." JCCPS, Ex. A, p. 15. While a dictionary definition of "data rate" includes "the speed at which a circuit or communications line can transfer information, usually measured in bits per second (bps)" (*see* Ex. 3, Microsoft Computer Dictionary, Fifth Ed., 2002, p. 144 (definition of "data rate")), this definition itself recognizes that measurement in bits per second is not required ("usually").

3. a data stream having a given data rate [Claims 1, 25]

the data rate of the stream [Claim 1]

the data rate [Claims 1, 8, 25, 26]

Emblaze has addressed these claim terms in the immediately preceding section.

4. slice [Claims 1, 11, 23, 25, 37]

"Slice" should be construed to mean "a segment of the data stream." JCCPS, Ex. A, p. 19. Emblaze's construction is consistent with the ordinary meaning of the claim term, and is supported by the patent specification. *See, e.g.*, 2:4-6 ("The data stream is divided into a sequence of segments or slices of the data, preferably time slices, wherein the data are preferably compressed.").

Apple's proposed construction, "a discrete segment of the data stream that results from the data stream being divided" is ambiguous and should be rejected. Apple does not explain what "discrete" means or how a "discrete segment" is different from a "segment."

Also, all of the claims recite, "dividing the stream into a sequence of slices," so it is superfluous to define "slice" as "result[ing] from the data stream being divided", as Apple proposes.

5. each slice having a predetermined data size associated therewith [Claims 1, 25]

This claim term should be construed to mean "each slice having an assigned data size which may be an assigned time duration." JCCPS, Ex. A, p. 24. Emblaze's construction is consistent with the ordinary meaning of the claim term, and is supported by the specification. *See, e.g.*, 5:33-35, "Further preferably, the data stream includes multimedia data, and the predetermined data size of each of the slices corresponds to a time duration of the slice." Emblaze's claim construction is further supported by reference to claim 23, which depends from claim 1, and adds the following limitation: "wherein dividing the stream into the sequence of slices comprises dividing the stream into a sequence of time slices, each having a predetermined duration associated therewith." Thus,

claim 23 also makes clear that the predetermined data size of the slices in claim 1 may comprise a "predetermined duration." The same analysis applies to claim 37, which ultimately depends from claim 25.

Apple would construe this term as, "each slice has an amount of data, measured in bits, that is assigned in advance of the stream being divided." JCCPS, Ex. A, p. 24. That is wrong. The "predetermined data size" is not required to be "an amount of data, measured in bits," because it may be "predetermined" by setting a time duration for the slices, as noted above. *See also* 2:4-6, "The data stream is divided into a sequence of segments or slices of the data, preferably time slices"; 5:34-35, "[T]he predetermined data size of each of the slices corresponds to a time duration of the slice"; 7:23-25, "Each slice contains a segment of video and/or audio data, corresponding to a respective, successive time interval labeled T_1, T_2, T_3, etc."; 9:33-35, "The sizes of the files may be varied by adjusting slice durations T_1, T_2, T_3, etc."; and 13:44-46, "will not necessarily be time slices as described hereinabove, but may rather have an appropriate, preferably variable, data size associated therewith".

Apple's construction also improperly requires that the data size of the slices be assigned in advance of the stream being divided. Nothing in the claim language supports such a requirement. The citations to the specification and priority application which Apple relies upon are either preferred embodiments or do not identify when the data size of the slice is assigned. Moreover, and as explained above, it is improper to import a limitation from the specification into the claim unless the specification uses "words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *Teleflex, Inc.*, 299 F.3d at 1327. Here, there is no disavowal of claim scope in the specification or prosecution history of the '473 Patent that mandates a construction that requires assigning the data size of the slices before the stream is divided.

6. encoding the slices in a corresponding sequence of files [Claim 1]

encodes the slices in a corresponding sequence of files [Claim 25]

These claim terms should be construed to mean "forming each slice as a file, wherein a file includes data from a corresponding slice and a file descriptor, and wherein the sequence of files corresponds to the sequence of slices." JCCPS, Ex. A, p. 30. Emblaze's construction is consistent with the ordinary meaning of these claim terms, and the specification supports Emblaze's construction. *See, e.g.,* "Preferably, each segment or slice is contained in a separate, respective file." (2:22-23); "Computer 34 stores each slice as a corresponding file, having a running slice index . . ." (7:27-28); "FIG. 3D is a block diagram that schematically illustrates a file format of a multi-level data stream 41 . . . Each slice is preferably identified by a level identifier 57, a presentation time stamp (PTS) index 59 and, as appropriate, a size identifier 61. The function of these identifiers and indices is described further hereinbelow." (8:42-51). Emblaze's construction is also consistent with the dictionary definition of "encode" ("2. In programming, to put something into code, which frequently involves changing the form -- for example, changing a decimal number to binary-coded form.") and "encoder" ("1. In general, any hardware or software that encodes information --- that is, converts the information to a particular form or format. For example, the Windows Media Encoder converts audio and video to a form that can be streamed to clients over a network."). *See* Ex. 3, Microsoft Computer Dictionary, Fifth Ed., 2002, p. 192.

Apple contends that these claim elements are invalid for failing to satisfy the written description and enablement requirements of 35 U.S.C. § 112, ¶ 1. While Emblaze disputes these contentions, as discussed above these invalidity contentions are not appropriate for determination in a claim construction proceeding. *See Liebel-Flarsheim*, 481 F.3d at 1380.

Apple's alternative argument that these claim terms are indefinite in violation of 35 U.S.C. §112, ¶2 fails because this term is amenable to construction, as explained above. *See Energizer*

Holdings, Inc. 435 F.3d at 1371. Apple argues that claims 1 and 25 are indefinite because they recite that encoding occurs after the data stream has been divided into slices, whereas the specification requires that encoding take place before slicing. But the specification does not require that the encoding referenced in claim 1 take place before slicing, and there is no inconsistency. *See, e.g.*, 11:67-12:2 ("At step 88 (FIG. 5), the time required to upload file 42 is measured and compared to T_1, at the same time as file 44 (slice 2) is being encoded and prepared."). Indeed, it would be illogical to "encode" a slice into a file before the slice is created.

The differences among claims 1, 15 and 16 also inform the meaning of "encoding". *See Phillips*, 415 F.3d at 1314. Claim 16 depends from claim 15, which in turn depends from claim 1.[4] Claim 15 adds a limitation to claim 1 concerning uploading the sequence of files, and claim 16 adds the following limitation to claim 15: "wherein encoding the stream comprises compressing data in the stream at a desired compression ratio, and wherein adjusting the upload rate comprises changing the compression ratio." (emphasis added). It is clear from these claims that "encoding" is used in two different contexts in the claims of the '473 Patent. In claim 1, "encoding" is used in the context of "encoding the slices," whereas in claim 16, "encoding" is used in the context of "encoding the stream". As explained above, in the context of claim 1, "encoding the slices" means forming each slice as a file, wherein a file includes data from the slice and a file descriptor. In claim 16, however, "encoding the stream" is expressly defined to mean "compressing data in the stream." *See Microprocessor Enhancement Corp.*, 520 F.3d at 1376 ("Unlike the claim at issue in *Process Control*, 'condition code' as used in claims 1 and 7 is not surrounded by uniform language that requires a single interpretation of the term.". . . Indeed, the claims' apparent nonsensical reading

[4] "[A] claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." 35 U.S.C. § 112, ¶4.

under a uniform construction of 'condition code' is indicative of the ease of determining the appropriate meaning of each use of the term from its context.").

Simply put, there is nothing "insolubly ambiguous" about these claim terms, and therefore they are not indefinite.

Apple alternatively contends that these claim terms should be construed as "compressing each slice and saving each compressed slice as a file after the dividing step." JCCPS, Ex. A, p. 30. But this is wrong because Apple's construction improperly imports a "compression" limitation into claims 1 and 25, when there is nothing in the claim terms at issue that requires compression. Indeed, the specification explicitly states that compression is not required. *See* 6:54-56 ("Preferably, the data in the sequence are compressed, although compression is not essential to implementation of the present invention." (emphasis added); *see also* 2:1-28).

7. sequence of files, each file having a respective index [Claims 1, 25]

This term should be construed to mean "a sequence of files, wherein each file has an indicator that distinguishes the file from other files." JCCPS, Ex. A, p. 40. Emblaze's construction is consistent with the ordinary meaning of this term, and the specification supports Emblaze's construction. *See* 7:27-28 ("Computer 34 stores each slice as a corresponding file, having a running slice index 1, 2, 3 . . . N"); 7:59-64 ("FIG. 3B is a block diagram that schematically illustrates an index file 50 . . . . The index file comprises a slice ID 52, indicating the index of the file in data stream 40 that was most recently uploaded by computer 34"); 7:66-8:1 ("Preferably, ID 52 holds the file name of the new file, wherein the name typically comprises a string followed by the index of the file."); 8:1-5 ("When one of computers 30 connects to server 36 and begins to download the data stream, it first reads the index file in order to identify at what point in stream 40 to being and to start receiving the data stream substantially in real time . . ."); 8:23-26 ("The symbols J, J+1, J+2, . . . N in the figure are the indices of the slices of stream 40 . . . wherein N is the index of the most recent

slice, and J is the index of the earliest stored slice."). As is apparent, the specification consistently uses the term "index" to refer to an indicator that distinguishes one file from the next, e.g., the index could be the file name.

Apple would construe this claim term as "a sequence of files, wherein each file contains an alphanumeric indicator stored therein that represents a respective slice's location in the sequence." (emphasis added). JCCPS, Ex. A, p. 40. Apple's construction is wrong because it would unduly limit this claim term by improperly importing limitations from the specification into the claims. There is no basis in the claim language at issue for limiting "index" to an "alphanumeric indicator" or to an indicator that represents the slice's "location" in the sequence, nor is there any express disavowal in the specification or prosecution history that would warrant such a construction. The "index" need only differentiate one file from another.

8. uploading the sequence to a server at an upload rate generally equal to the data rate of the stream [Claim 1]

which uploads the sequence to a server at an upload rate generally equal to the data rate [Claim 25]

These claim terms should be construed to mean "uploading files in the sequence from the transmitting computer to a server at an upload rate generally equal to the data rate of the stream." JCCPS, Ex. A, p. 49. Emblaze's construction is consistent with the ordinary meaning of these terms, and the specification supports Emblaze's construction. *See, e.g.*, 2:7-9 ("The transmitting computer uploads the sequence of slices to the server substantially in real time."); *see also* 3:43-45 ("Preferably, uploading the sequence includes comparing the upload rate to the data rate and adjusting the upload rate responsive to the comparison"); and 7:27-34 ("Computer 34 stores each slice as a corresponding file . . . . The files are uploaded to server 36, such that while any given slice (other than first slice 42) is being created, one or more preceding slices are in the process of being uploaded").

Apple contends that these claim terms render claims 1 and 25 invalid for failing to satisfy the written description and enablement requirements of 35 U.S.C. § 112, ¶ 1, allegedly because the specification does not demonstrate how "one can control the data rate at which the 'sequence' is uploaded to the server such that it is 'generally equal' to the data rate of the originally provided data stream". JCCPS, Ex. A, p. 49. While Emblaze disputes these invalidity contentions, as explained above invalidity for inadequacy of written description and enablement is not properly before the Court in a claim construction proceeding.

Apple also contends that the use in these claim terms of the expression "generally equal" renders claims 1 and 25 indefinite because "'generally equal' is inherently subjective". JCCPS, Ex. A, p. 49. Indefiniteness, like other invalidity defenses, must be proved by clear and convincing evidence (*Microsoft Corp.*, 131 S. Ct. at 2251-2), and only where a "'claim is insolubly ambiguous, and no narrowing construction can properly be adopted,'" will a claim be found to be indefinite. *Honeywell Int'l, Inc.*, 341 F.3d at 1338-9 (citation omitted).

Apple's indefiniteness argument lacks merit because "generally equal" is not insolubly ambiguous. It is a term of approximation, similar to "substantially". *Anchor Wall Systems, Inc.*, 340 F.3d at 1310-1311 ("[W]ords of approximation, such as 'generally' and 'substantially,' are descriptive terms commonly used in patent claims to avoid a strict numerical boundary to the specified parameter." (internal quotations omitted)). The ordinary meaning of "generally equal" is clear --- it means approximately, but not necessarily exactly, equal. *See Anchor Wall Systems, Inc.*, 340 F.3d at 1311 ("'generally parallel' envisions some amount of deviation from exactly parallel").

As an alternative to its invalidity arguments, Apple contends that these claim terms mean "transmitting the files from the transmitting computer to the server at a speed, as measured in bits per second, that closely matches 'the data rate' [as defined in Term # 3 above]." JCCPS, Ex. A, p.

49. Apple's proposed construction incorporates the same erroneous interpretation of the term "rate" as Apple proposes for claim terms "2" and "3" above, and the Court is referred to that discussion for the reasons that "rate", whether an "upload rate," "download rate" or "data rate," should not be construed as "speed, as measured in bits per second", but instead should be construed as an amount of data per unit of time.

Apple also would improperly narrow the construction of these claim terms by construing "generally equal" as "closely matches," rather than accepting the ordinary meaning. The claim term is "generally equal", and there is no basis for further construing that expression to mean "closely matches"; the ordinary meaning suffices.

9. such that one or more client computers can download the sequence over the network from the server at a download rate generally equal to the data rate [Claims 1, 25]

This claim element should be construed to mean "one or more client computers are capable of selecting individual files corresponding to the slices for download over the network at a download rate generally equal to the data rate." JCCPS, Ex. A, p. 54. Emblaze's construction is consistent with the ordinary meaning, and the specification supports Emblaze's construction. *See, e.g.*, 2:11-12 ("The clients download the data stream from the server . . ."); 2:15-17 ("The clients use the slice indices of the frames to maintain proper synchronization of the playback"); 2:17-21 ("The division of the data stream into slices and the inclusion of the slice indices in the data stream to be used by the clients in maintaining synchronization allows the broadcast to go on substantially in real time without the use of special-purpose hardware.").

For the same reasons that Apple articulates for claim term "8", Apple contends that this claim term renders claims 1 and 25 indefinite and in violation of the written description and enablement requirements. JCCPS, Ex. A, p. 54. The Court is referred to Emblaze's discussion above with respect to claim term "8" where Emblaze explains the flaws in Apple's invalidity arguments.

As an alternative to its invalidity arguments, Apple contends this claim term means "each client receiving the broadcast requests and receives each file of the sequence from the server at a transmission speed, as measured in bits per second, that closely matches 'the data rate' [as defined in Term # 3 above]." JCCPS, Ex. A, pp. 54-55.

First, Apple's use of "closely matches" in its construction is wrong for the same reasons that Apple's use of "closely matches" in its construction of claim term "8" is wrong, as discussed above.

Second, Apple improperly construes this claim term to require that each client "requests and receives each file," but the disputed claim language uses the term "can", indicating only that the "one or more client computers can download the sequence …" (emphasis added). There is no requirement in the claim language that any particular client computer actually performs the step of downloading the sequence of files.

Third, Apple improperly construes this claim term to require that "each file" (presumably meaning all files of the sequence) are received by the client, but again, there is nothing in the claim language that requires clients to actually download all of the files in a sequence, nor is there any express disavowal in the specification or prosecution history mandating that construction.

Fourth and finally, Apple's construction incorporates substantially the same erroneous interpretation of the term "rate" as Apple proposes for terms "2" and "3", and the Court is respectfully referred to Emblaze's discussion of claim terms "2" and "3" above for the reasons that "rate", whether an "upload rate," "download rate" or a "data rate", should not be construed as "speed, as measured in bits per second", but instead should be construed as an amount of data per unit of time.

10. decode the sequence [Claims 8, 26]

This term should be construed to mean "retrieving at least a portion of the data stream from the downloaded files." JCCPS, Ex. A, p. 61. Emblaze's construction is consistent with the ordinary meaning, and the specification supports Emblaze's construction. *See, e.g.,* "The slices are received, decoded and output by the client." (11:7-8).

Apple would improperly construe "decode" in this claim term to mean "decompress". JCCPS, Ex. A, p. 61. But as explained above with respect to claim term "6," the meaning of "decode" depends on the context in which it is used, and like claim term "6," there is nothing in the claim language at issue here that limits "decode" to "decompress". The word "decode" may include "decompress", but is broader than that, *e.g.,* it also includes simply extracting the data content from the files, regardless of whether the data were compressed. *See Liebel-Flarsheim Co. v. Medrad, Inc.,* 358 F.3d at 906. And as already noted, the specification of the '473 Patent makes clear that compression is not required. *See, e.g.,* 6:54-56 ("Preferably, the data in the sequence are compressed, although compression is not essential to implementation of the present invention."). Indeed, compression is not affirmatively recited in the claims until claim 16 (which ultimately depends from independent claim 1), and claim 31 (which ultimately depends from independent claim 25).

11. play back the data stream responsive to the indices of the files [Claim 8]

play back the data stream responsive to the indices thereof [Claim 26]

These terms should be construed to mean "playing back the data stream based on the indices of the files to be played back." JCCPS, Ex. A, p. 66. The expression "indices of the files" should be construed consistently with "each file having a respective index" in claim term "7". Emblaze's construction is consistent with the ordinary meaning, and the specification supports Emblaze's construction.

Apple contends that these terms mean, "play back the data stream in the order of the indices by reading the index contained in each file". JCCPS, Ex. A, p. 66 (emphasis added). But nothing in the claim language requires that the play back be "in the order of the indices" (emphasis added). Rather, the claim language only requires that the play back be "responsive" to the indices of the files, and the specification explains that "a user can decide and indicate at which slice of data stream 40 to begin downloading. Responsive to a user input, client 30 selects an appropriate starting slice and begins to download and decode (decompress) files 42, 44, 46, etc." 10:43-48 (emphasis added). Apple omits the highlighted language from its citation to supporting evidence, JCCPS, Ex. A, p. 68, but the highlighted language makes clear that the play back does not have to be in the order of the indices. *See also* 8:7-8 and 8:32-41.

Similarly, nothing in the claim language requires that the index be "contained in each file". As already noted for claim term "7", the index may, *e.g.*, be a file name.

Once again, Apple's proposed claim construction would improperly import limitations from the specification into the claim. *See Altiris, Inc.,* 318 F.3d at 1369.

12. at a replay rate generally equal to the data rate [Claim 8]

at a data replay rate generally equal to the data rate [Claim 26]

These claim terms should be construed to mean "the rate at which the client plays back the data stream is generally equal to the data rate of the stream." JCCPS, Ex. A, p. 70. Emblaze's construction is consistent with the ordinary meaning, and the specification supports Emblaze's construction. *See, e.g.,* 10:24 – 11:22, and Figures referenced therein.

For substantially the same reasons as those that Apple relies upon for claim terms "8" and "9", Apple argues that these claim terms render claims 8 and 26 indefinite and in violation of the written description and enablement requirements. JCCPS, Ex. A, p 70. The Court is referred to

Emblaze's discussion above with respect to claim term "8" where Emblaze explains the flaws in Apple's invalidity arguments.

As an alternative to its invalidity arguments, Apple contends that these claim terms mean, "The speed the client computer plays back the downloaded slices, as measured in bits per second, closely matches 'the data rate' [as defined in Term #3 above]." JCCPS, Ex. A, p 70.

First, Apple's use of "closely matches" in its construction of this claim term is wrong for the same reasons that Apple's use of "closely matches" in its construction of claim terms "8" and "9" is wrong, as discussed above. Second, Apple's construction of "rate" is wrong for the same reasons discussed above with respect to claim terms "2" and "3".

13. uploading and updating an index file containing the index of the file in the sequence that was most recently uploaded [Claim 9]

This claim term should be construed to mean "uploading to a server an index file, and updating the index file with the index of the most recently uploaded file." JCCPS, Ex. A, p. 75. Emblaze's construction is consistent with the ordinary meaning, and the specification supports Emblaze's construction. *See, e.g.,* 7:59-62 ("FIG. 3B is a block diagram that schematically illustrates an index file 50, which is created by computer 34, and is uploaded to server 36, in accordance with a preferred embodiment of the present invention"); 7:65-66 ("Each time a new file 42, 44, 46, etc. is uploaded, ID 52 in file 50 on server 36 is updated."); and 10:3-5 ("Each time a new file is uploaded to the server, index file 50 (FIG. 3B) is updated, at step 86.").

Apple would construe this claim term as, "uploading to the server a file that contains a single alphanumeric index variable and changing the variable to equal the index of the most recently uploaded file." JCCPS, Ex. A, p. 75. But there is no basis in the claim language for Apple's "single . . . variable" limitation with respect to the index file, and here again Apple seeks to improperly import a limitation from the specification into the claim. Also, and for the same reasons explained

above for claim term "7", it is wrong to limit the "index file" to one that contains "an alphanumeric" index variable, as Apple proposes.

14. encoding slices at a plurality of different quality levels [Claim 11]

slices are encoded at a plurality of different quality levels [Claim 40]

These claim terms should be construed to mean "forming slices at more than one quality level." JCCPS, Ex. A, p. 79. Emblaze's construction is consistent with the ordinary meaning, and the specification supports Emblaze's construction. *See, e.g.* 3:5-6, ("the slices are provided by the server at multiple resolution or quality levels"); 4:39-43 ("encoding the slices includes encoding slices at a plurality of different quality levels, such that the files corresponding to a given one of the slices have a different, respective data size for each of the quality levels").

Apple would construe these terms to mean "compressing each slice at two or more different compression levels." JCCPS, Ex. A, p 79. But there is nothing in the language of these claim terms that requires that "encoding" or "encoded" be limited to "compressing". The Court is referred to Emblaze's discussion above with respect to claim term "6" concerning the meaning of "encoding".

15. determining a data bandwidth of the network between the server and the client computer [Claim 12]

This term should be construed to mean "the client determines a data rate at which a client can download a file from the server." JCCPS, Ex. A, p. 83. Emblaze's construction is consistent with the ordinary meaning, and the specification supports Emblaze's construction. *See e.g.*, 3:5-13; 9:6-9; 10:64-11:22.

Apple contends this claim term is invalid for failing to satisfy the written description and enablement requirements of 35 U.S.C. § 112, ¶ 1. JCCPS, Ex. A, pp. 83-84. Emblaze disputes these invalidity contentions, but, regardless, they are not properly considered in a claim construction proceeding, as discussed above.

In the alternative, Apple contends that this claim term means "the client measures the data transfer capacity, in bits per second, of the network connection between the server to which the sequence of files is uploaded and the client computer operated by the user requesting the download." JCCPS, Ex. A, p. 84.

First, for reasons similar to those explained above with respect to claim terms "2" and "3", nothing in this claim term restricts the determination of a data bandwidth to a measurement in bits per second.

Second, Apple's proposed construction would require that the client "measures the data transfer capacity" of the network connection. This too should be rejected because there is nothing in the claim language that requires a "measurement", or that the "data transfer capacity" be measured. All that the claim requires is "determining a data bandwidth", but that does not require a measurement of a data transfer capacity. For example, the specification explains that one way of "determining a data bandwidth" of the network connection between the server and the client computer is by monitoring the time stamps on the slices, which does not require that the client "measures the data transfer capacity" of the connection: "For example, if the rate is low, such that time stamps 59 indicate that the slices need to be played as fast as or faster than they are being received, the client will preferably select a lower quality level if one is available. On the other hand, if the rate is substantially higher than what is needed to receive the successive slices on time, the client may select a higher quality level to take advantage of the available bandwidth". 11:11-18.

16. wherein dividing the stream into the sequence of slices comprises dividing the stream into a sequence of time slices, each having a predetermined duration associated therewith [Claim 23]

wherein the predetermined data size of each of the slices corresponds to a time duration of the slice [Claim 37]

These claim terms should be construed to mean "the stream is divided into a sequence of slices, where the predetermined data size of the slices is established by setting the time duration of the slices." JCCPS, Ex. A, pp. 86-87. Emblaze's construction is consistent with the ordinary meaning, and the specification supports Emblaze's construction. *See e.g.*, 2:4-6; 4:39-43; 5:15-18; 5:33-35; 7:4-25; 8:56-9:5; 9:33-35; 11:53-12:17; 13:41-45. As explained above in connection with claim term "5", the specification explains that setting the time duration of a slice may be used to establish a data size for the slice.

Apple contends that this claim term means "the stream is divided into a sequence of slices, each slice having an assigned data size and an assigned time duration, with both the data size and time duration of each slice being assigned in advance of the stream being divided." JCCPS, Ex. A, pp. 86-87. Apple's proposed construction improperly limits the scope of this claim term in at least two ways. First, there is no requirement in the claim language that there be separate assignments of data size and time duration for each slice. When a time duration is set, it may be a proxy for assigning a data size, i.e., assigning a time duration inherently limits the data size. Second, there is no requirement in the claim language that the time duration be assigned "in advance of the stream being divided", and there is no basis for reading such a limitation into the claim. The Court is referred to Emblaze's discussion of claim term "5" above addressing Apple's proposed construction requiring that the data size be assigned in advance of the stream being divided.

IV. CONCLUSION

For the reasons set forth above, Emblaze respectfully requests that the Court adopt its proposed claim constructions.

Respectfully Submitted,

DATED: May 31, 2012

COZEN O'CONNOR
DAVIS WRIGHT TREMAINE LLP

By /s/ Martin B. Pavane/
Martin B. Pavane

Attorneys for Plaintiff Emblaze Ltd