

# Exhibit 21



*Springs Window Fashions LP v. Novo Industries, L.P.*,  
323 F.3d 989 (Fed. Cir. 2003) ..... 11, 12, 13

*Sulzer Textil A.G. & Sulzer Textile v. Picanol N.V.*,  
351 F.3d 1120 (Fed. Cir. 2003) ..... 6, 7, 18, 27

*Texas Digital System v. Telegenix, Inc.*,  
308 F.3d 1193 (Fed. Cir. 2002) ..... 7, 10, 11, 14, 16, 30

*TurboCare Division of Demag Delaval Turbomachinery Corp. v. General Electric Co.*,  
264 F.3d 1111 (Fed. Cir. 2001) ..... 8

*Valmont Industries, Inc. v Reinke Manufacturing Co, Inc.*,  
983 F.2d 1039 (Fed. Cir. 1993) ..... 17

*Vitronics Corp. v. Conceptoronic Corp.*,  
90 F.3d 1576 (Fed. Cir. 1996) ..... 10

*WMS Gaming, Inc. v. International Game Tech.*,  
184 F.3d 1339 (Fed. Cir. 1999) ..... 23

**FEDERAL STATUTES**

35 U.S.C. §112, ¶ 6 ..... 16, 17

would leave the jury to determine what “relationship” means. In a distorted implementation of *Markman*, the parties would likely have to ask the jury to decide not the operation of Microsoft’s software, but the meaning of “relationship” in the construction of this term. See *Sulzer Textil*, 351 F.3d at 1129 (“This means that, as to claim coverage, the district court must instruct the jury on the meanings to be attributed to all disputed terms used in the claims in suit so that the jury will be able to ‘intelligently determine the questions presented.’”).

## 2. “Time Compressed Representation”

Microsoft has construed the term “time compressed representation” by determining its ordinary meaning, reviewing the file history to see if the file history confirms that definition (which it does), and then reviewing the specification to see if it mandates a different meaning. This is exactly what the law requires. See *Texas Digital Sys. v. Telegenix, Inc.*, 308 F.3d 1193, 1204-05 (Fed. Cir. 2002). The Court should therefore construe the claim term “time compressed representation” to mean compressing the audio/video source information small enough to be transmitted in a predetermined time period – *i.e.*, an associated time period known when the data is compressed.<sup>6</sup>

Burst’s proposed construction is simply flawed, using vague words to obscure that now – 15 years after it applied for its patents – it is trying to claim data compression generally although Mr. Lang admittedly did not invent ordinary data compression. B Br. at 8 (“an information structure that reduces a temporal quality of the information”). Burst all but admits that under its construction, its claims would cover all use of regular data compression whenever some of the compressed data has a time base – *e.g.*, a normal play time. Thus, Burst says:

MICROSOFT also attempts to establish that a **time compressed representation** “is not the same as compressed data” in an ongoing effort to drive a wedge between the ordinary compression taught by the ‘995 Patent and ... the specified form of time compression advocated by MICROSOFT. ... The ‘995 Patent specification explicitly discloses ordinary data compression as it makes numerous references to traditional “*data compression techniques[s]* for efficient storage, transmission, and reception of a digitized audio/video program.” B Br. at 20.

<sup>6</sup> Burst also construes “representation” as “an information structure,” although the construction of this term has never been in dispute. B Br. at 8. Microsoft does not disagree with this construction although it unnecessarily complicates what should really be construed simply as “data.”

Patent Office are appropriate intrinsic evidence of the proper construction of claim term and thus bind an applicant. *See Jonsson v. Stanley Works*, 903 F.2d 812, 818 (Fed. Cir. 1990) (“the prosecution history of a patent contains ‘all express representations made by or on behalf of the applicant to the examiner to induce a patent grant’”) (citations omitted). Simply put, Burst distinguished ordinary data compression from time compression in the Patent Office and cannot now retract that distinction.

Ignoring the intrinsic evidence, Burst instead cites post-filing articles about its prototype systems and its expert’s naked opinion on the meaning of “time compressed representation.” Both approaches are legally impermissible. First, Burst’s articles about its prototype system are completely irrelevant to claim construction. *See* B Br. at 11, *citing* Exs. N and O. Patent claims are construed as of the date on which the priority patent was filed, in this case December 1988 (Burst’s articles are from 1991 and 1999). Even later changes in the meaning of a term (for which these articles provide no evidence) do not change the meaning of a patent claim. *Kopykake Enterprises, Inc. v. Lucks Co.*, 264 F.3d 1377, 1383 (Fed. Cir. 2001). No patent law doctrine says that patent claims should be construed based on what the patentee was doing eleven years after filing a patent application. In addition, these articles do not even use the disputed “time compressed” term, undercutting Burst’s proposed construction and demonstrating that this term cannot mean all faster than real time transmission. *See* Burst’s Exs. N and O.

Second, Burst’s reliance on its own expert’s unsupported opinion, also extrinsic evidence, is misplaced. Such opinion testimony cannot overcome the ordinary meaning shown in the intrinsic evidence, including the Haskell patent.<sup>9</sup> “Extrinsic evidence [e.g., expert testimony] is to be used for the court’s understanding of the patent, not for the purpose of varying or contradicting the terms of the claims.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 981 (Fed. Cir. 1995) (*en banc*), *aff’d*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996); *see also Vitronics Corp. v. Conceptor Corp.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). “Where the patent documents are unambiguous, expert testimony

<sup>9</sup> Note too that even if it was extrinsic evidence (which it is not), objective resources like the Haskell patent are much preferred to the raw expert testimony Burst offers. *See Texas Digital*, 308 F.3d at 1202-03 (“Dictionaries, encyclopedias and treatises, publicly available at the time the patent is issued, are objective resources that serve as reliable sources of information on the established meanings that would have been attributed to the terms of the claims by those of skill in the art. Such references are unbiased reflections of common understanding not influenced by expert testimony or events subsequent to the fixing of the intrinsic record by the grant of the patent, not colored by the motives of the parties, and not

regarding the meaning of a claim is entitled to no weight.” *Texas Digital*, 308 F.3d at 1212, citing, *Vitronics*, 90 F.3d at 1584. Moreover, Burst cites its expert for the proposition that the term “time compression ‘appears in numerous engineering contexts’ and has ‘multiple meanings,’” see B Br. at 18, but fails to provide these supposed other meanings or their sources. Expert testimony must consist of more than mere unsupported assertions. *Arthur A. Collins, Inc. v. N. Telecom, Ltd.*, 216 F.3d 1042, 1047-48 (Fed. Cir. 2000).

Burst’s acquiescence that the meaning of “time compressed representation” is set forth in the Haskell patent while obtaining its patents dooms its *ex post* claim construction efforts. As a result, Burst fights hard to explain why this Court should ignore the Haskell patent and what Burst told the Patent Office about it:

(a) Burst asserts that the Haskell patent is “extrinsic” evidence, even though it was cited to the Patent Office and discussed with the Examiner. B Br. at 18. Because it is cited art, however, the Haskell patent is intrinsic evidence. See *Kumar*, 351 F.3d at 1368 (Fed. Cir. 2003).

(b) Burst next tries to dissuade the Court from considering its statements about Haskell by accusing Microsoft of “latching on to a passing reference cited in the prosecution history” (B Br at 13) and asserting that “it can hardly be considered part of the prosecution history beyond one mere passing and distinguishing remark directed to other factors.” B Br. at 19. Burst’s argument is inconsistent with the law. The Haskell patent is intrinsic evidence and cannot be ignored. See *Kumar*, 351 F.3d at 1368.

(c) Burst tries to dissuade the Court from considering the Haskell patent on the basis that “Burst came to no agreement with the Examiner, in the context of Haskell, that time compression is not regular compression.” B Br. at 17. That is entirely irrelevant. All representations to the Patent Office are appropriate intrinsic evidence of the proper construction of a claim term, even if no agreement is reached. See *Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994-95 (Fed. Cir. 2003); *Laitram Corp. v. Morehouse Indus., Inc.*, 143 F.3d 1456, 1462 (Fed. Cir. 1998). Here, Burst acknowledged that time compression differs from ordinary compression, and the Court and third parties are entitled to rely on

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inspired by litigation.”).

restricts them to certain network types, the claims are indeed so limited.<sup>12</sup> *See Johnson & Johnston*, 285 F.3d at 1052. Burst claimed a “time compressed representation” and must accept the restrictions that follow from its use of that term.

**B. “Audio/Video Transceiver”**

Microsoft construes the claim term “audio/video transceiver” by starting with the claim language, determining its ordinary meaning, and then confirming that meaning in the specification. *See Texas Digital*, 308 F.3d at 1204-05. Burst used the term “transceiver” in its claims, putting third parties on notice that its claims reach only a “transceiver.” Burst cannot now extend its claim to cover something else.

In its eagerness to assert ownership over Internet transmission of audio/video using personal computers, however, Burst offers a construction of the term “transceiver” that would cover different pieces of software running on different computers located in different places – even in different buildings. Indeed, Burst apparently asserts that its patent covers software solutions where content is received in one location, compressed in another location, and transmitted across the Internet from a third location. Such a system clearly does not describe a single “transceiver.” But Burst contends otherwise,

<sup>12</sup> Although Burst claims that “Dr. Von Herzen myopically focuses on the telephone line” (B Br. at 13), Dr. Von Herzen provided his understanding of the meaning of this claim term, the file history, and the cited art. He only noted that his understanding was consistent with the specification, and discussed all the communications media disclosed therein, including fiber optic telephone lines and regular telephone lines. Restricting Burst’s claims to fixed bandwidth connections, however, is a result of the ordinary meaning of the term Burst chose to use in its patents because time compression is only possible with fixed bandwidth lines. *See Ex. D, Von Herzen Decl.*, ¶ 32. The patent, consistent with Microsoft’s interpretation, discloses only fixed bandwidth lines, a fact that Dr. Von Herzen noted. *See Merck & Co., Inc. v. Teva Pharm. USA, Inc.*, 347 F.3d 1367, 1371 (Fed. Cir. 2003) (“claims must be construed so as to be consistent with the specification”).

Burst also attacks Microsoft’s expert, Dr. Von Herzen, contending that he “waffled” and “expressly and repeatedly contradicted the previous statements in his expert report.” B Br. at 15. Dr. Von Herzen testified consistent with his expert report. Burst simply refuses to understand the relevant technology in the telephone system and the different pieces comprising it. Burst, for example, equates the “local loop” with a “telephone line.” B Br. at 16. But, as Dr. Von Herzen patiently explained in his deposition, the local loop is a just wire from a house to the central office. *See Ex. Y, Deposition of Brian Von Herzen (“Von Herzen Dep.”)*, dated December 18, 2003, at 70-71. As an unshared wire, it is neither circuit switched or time division multiplexing because only one party uses it and it stretches the entire way from the home to the central office. *See Ex. Y., Von Herzen Dep.* at 76, 93-94, 111. The local loop is just one part of a telephone line connection, called POTS, through the telephone network – a network that unquestionably uses circuit switching and time division multiplexing. *See Ex. Y, Von Herzen Dep.* 70-71, 79-80, 92; B Br at 16. Burst’s supposed “gotcha” of Dr. Von Herzen lacks any basis in fact and, moreover, is simply irrelevant to the proper construction of “time compressed representation.”

testimony or events subsequent to the fixing of the intrinsic record by the grant of the patent, not colored by the motives of the parties, and not inspired by litigation.” *Texas Digital*, 308 F.3d at 1203.<sup>14</sup>

**C. Burst’s Means Plus Function Claim Elements**

Each and every apparatus claim that Burst asserts includes one or more elements drafted as a “means for” performing a certain function without delimiting physical structure. Each and every one of these apparatus claim elements is presumed to invoke the protection against invalidity that Section 112, ¶ 6 accords. *See Kemco Sales, Inc. v. Control Papers Co., Inc.*, 208 F.3d 1352, 1361 (Fed. Cir. 2000) (“use of the term ‘means’ in a claim limitation creates a presumption that section 112, paragraph 6 has been invoked”) And, accordingly, each such element “shall be construed to cover the corresponding structure ... described in the specification and equivalents thereof.” 35 U.S.C. 112, ¶ 6.

For each such “means” claim element, Burst’s chosen form poses two issues for the Court: (1) has Burst overcome the presumption that the element is to be construed pursuant to Section 112, ¶6? and (2) if not, what specific structures are described in the specification as performing the recited function? *See Kemco*, 208 F. 3d at 1361. Although it may be a tedious undertaking, determining which elements are subject to Section 112, ¶ 6 and identifying the specific structures described in the specification that correspond to each recited function is a duty for the Court during claim construction. *See Chiuminatta Concrete Concepts, Inc. v. Cardinal Industries, Inc.*, 145 F.3d 1303, 1308 (Fed. Cir. 1998). That determination is necessary to any infringement assessment because when a patentee has invoked the protection provided by Section 112, ¶ 6, the accused device must be compared to the disclosed structure – not just to the recited function. *Id.* at 1309.

The very purpose of Section 112, ¶ 6 of the Patent Statute demonstrates the correctness of Microsoft’s, and the inadequacy of Burst’s, position on these claim elements. As announced in *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1 (1946), claims that recite an element simply as some “means for” performing a certain function are invalid as indefinite, vague, and overbroad. *Id.* at 12. Congress amended this result with the 1952 Patent Act to expressly allow “means plus function” claim

<sup>14</sup> Microsoft does not believe it is disputed, but nonetheless, transceiver should also be construed to be an apparatus that



*Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999) (“Use of the phrase ‘at least one’ means that there could be only one or more than one.”), citing *Kistler Instrumente AG v. United States*, 628 F.2d 1303, 1318, (Ct. Cl. 1980) (“Anyone with even the most rudimentary understanding of the English language understands ‘at least one piezo-electric crystal means lodged within said component means,’ to mean one or more crystals.”).

Burst, however, construes “at least one” to include less than one. Such a construction violates the most basic claim construction rule that the construction must be consistent with the claim language. See *Texas Digital*, 308 F.3d 1202-03.

The ordinary meaning of a “program” does not include a half of a movie, a few frames of a video, or a “short snippet.” B Br. at 6. Moreover, this ordinary meaning is consistent with Burst’s explanation of its claims to the Patent Office, although inconsistent with its current arguments. In procuring its patents, Burst described its claims containing this limitation to the Patent Office as “receiv[ing] and/or transmit[ing] an entire full motion video program, comprising tens of thousands of video frames.” Ex. L, Amendment “B” (January 4, 1991) at 8 (emphasis added). Thus, the intrinsic evidence supports Microsoft’s plain English construction.

Microsoft asks the Court to construe “said audio/video source information comprising a multiplicity of video frames collectively representing at least one full motion video program” to mean one or more entire video programs at 30 frames per second.

**G. The “Audio/Video Representation” Must Be Processed as a Whole**

The language of the claims plainly describes the “audio/video representation” being processed as a whole. Ignoring the claim language, Burst argues that the audio/video representation can be only part of a program by focusing entirely on the specification. See B Br. at 6-7. But the claims, not the specification, control the scope of the Burst’s patents. See *Johnson & Johnston Assocs. v. R.E. Serv. Co.*, 285 F.3d 1046, 1052 (Fed. Cir. 2002).

Microsoft’s construction is based on the claim language, which recites steps for processing the “audio/video representation.” See MS Br. at 51-52. The claims describe processing the

Burst's protests on this point raise the potential for jury confusion. Burst appears to be denying the clear language of its own claims. The Court should construe this claim language, as Microsoft proposes, as "programs of audio/video source information where each program is time compressed."

### CONCLUSION

As described above and in Microsoft's Opening Brief, Microsoft asks the Court to use the disputed claim terms' ordinary meanings, to follow the intrinsic evidence, and to adopt its proposed construction. Microsoft also asks the Court to construe Burst's means plus function claim elements as required by Section 112, ¶ 6 and to identify the structures in the specification disclosed as performing the identified functions.

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Respectfully submitted,

*RICHARD A. CEDEROTH /BPG*

Michael F. Brockmeyer  
(Fed. Bar No. 02307)  
Jeffrey D. Herschman  
(Fed. Bar No. 00101)  
PIPER RUDNICK LLP  
6225 Smith Avenue  
Baltimore, Maryland 21209-3600  
Telephone: (410) 580-4115

Philip L. Graham, Jr.  
David B. Tulchin  
Marc De Leeuw  
SULLIVAN & CROMWELL  
125 Broad Street  
New York, NY 10004-2498  
(212) 558-4000

Karen A. Popp (D.Md. No. 26145)  
SIDLEY AUSTIN BROWN & WOOD LLP  
1501 K Street, N.W.  
Washington, DC 20005

Thomas W. Burt  
Richard J. Wallis  
Steven J. Aeschbacher  
C. Andrew Culbert  
MICROSOFT CORPORATION  
One Microsoft Way  
Redmond, Washington 98052  
(425) 936-8080

Charles W. Douglas  
Richard A. CederOTH  
John W. Treece  
SIDLEY AUSTIN BROWN & WOOD  
Bank One Plaza, 10 South Dearborn Street  
Chicago, Illinois 60603  
(312) 853-7000