

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

BEDROCK COMPUTER
TECHNOLOGIES LLC,

Plaintiff,

v.

SOFTLAYER TECHNOLOGIES, INC., et
al.,

Defendants.

CASE NO. 6:09-CV-00269

Hon. Leonard E. Davis

JURY TRIAL DEMANDED

**REPLY IN SUPPORT OF DEFENDANTS' MOTION FOR SUMMARY JUDGMENT OF
INDEFINITENESS AS TO CLAIMS 1, 2, 5, AND 6 OF U.S. PATENT NO. 5,893,120**

I. INTRODUCTION

Defendants demonstrated in their motion that independent claims 1 and 5 and dependent claims 2 and 6 of the '120 patent are indefinite because the specification does not contain algorithms that correspond to functions in one or more computer software-implemented means-plus-function elements in each of these claims. Bedrock and its expert have failed to identify "a particular algorithm that performs the claimed function" for each function at issue. *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). Indeed, Bedrock's expert confirmed that each function at issue lacks a particular corresponding algorithm in the specification. Consequently, Defendants' motion for summary judgment of indefiniteness should be granted.

II. ARGUMENT

A. Bedrock Ignores The Relevant Case Law

In a means-plus-function claim "in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm." *WMS Gaming*, 184 F.3d at 1349. Absent any such algorithm, the claim lacks sufficient disclosure of structure under 35 U.S.C. § 112 ¶ 6 and is therefore indefinite under 35 U.S.C. § 112 ¶ 2. *Aristocrat Techs. Austl. Pty. Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1331 (Fed. Cir. 2008). *See generally* Mot. 5-6. Although Bedrock's expert, Dr. Jones, confirmed during his recent deposition that the means-plus-function elements in the claims of the '120 patent are implemented by a general purpose computer, Bedrock does not address or attempt to distinguish the *WMS Gaming* line of cases cited in Defendants' motion. (Jones Dep. at 159:13-160:12.)¹

¹ Dr. Jones was deposed on September 29, 2010. Excerpts from his testimony are attached as Exhibit A to the Declaration of Antonio Sistos.

B. Bedrock Fails To Identify A Specific Algorithm Corresponding To The "Record Search Means"

The parties agree that the only disclosure in the '120 patent that relates to the function of the "record search means" is "hashing." (Opp. 6; *see also* Jones Dep. at 199:13-17.) Bedrock contends that the disclosure of "hashing" provides adequate structure to save this limitation from indefiniteness. (Opp. 6-7.) However, Bedrock's argument is completely undermined by its own expert, who confirmed that "hashing" is anything but a specific algorithm:

- Q. And you've testified that the hash function that could be used for this particular algorithm could be one of any number of hash functions, correct?
- A. That's correct.
- Q. In fact, according to you, it could be any number of -- well, it could be almost an infinite set of hash functions, right?
- A. Yes.

Jones Dep. at 107:6-14; *see also* 92:18-93:1; 194:17-25. This testimony leaves no doubt that this means-plus-function limitation is indefinite. *See Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1385 (Fed. Cir. 2009) ("That ordinarily skilled artisans could carry out the recited function in a variety of ways is precisely why claims written in 'means-plus-function' form must disclose the particular structure that is used to perform the recited function."); *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 2009 U.S. Dist. LEXIS 64013 (E.D. Tex. 2009) (J. Davis) ("when language in the specification simply describes the function to be performed, not the algorithm by which it is performed, the claim term does not escape indefiniteness.")

Bedrock also contends that the "hash" function in the pseudocode is a specific hashing algorithm. (Opp. at n.1.) But this is nothing more than a recitation of a function² and "amounts to

² Under Bedrock's theory, an applicant could claim a "means for finding a cure for cancer using a computer" by disclosing pseudocode consisting entirely of a "cure_cancer()" function, without ever disclosing how that cure is actually arrived at by the computer.

pure functional claiming, which does not comply with the disclosure requirement of § 112 ¶ 6." *Encyclopaedia Britannica, Inc. v. Alpine Elec., Inc.*, 355 Fed.Appx. 389, 394-395 (Fed. Cir. 2009). Indeed, Dr. Jones confirmed that the "hash" function in the pseudocode does not "describe what particular hash function is being used." (Jones Dep. at 95:25-96:16.) Bedrock similarly points to a sentence in the '120 patent which states that "[t]ypical hashing functions include truncation, folding, transposition, and modulo arithmetic." (Opp. at n.1.) However, these generic arithmetic operations are not particular algorithms, as confirmed by Bedrock's expert.³ (*Id.* at 91:17-92:13.)

Bedrock relies on *Telcordia Techs, Inc. v. Cisco Systems* for the proposition that "the specification need only disclose adequate defining structure to render the bounds of the claim understandable to an ordinary artisan." (Opp. at 3.) However, Dr. Jones' testimony that there are an "infinite" number of algorithms that could correspond to the hashing function at issue confirms that an ordinary artisan could not understand the bounds of this claim. *Telcordia* is also distinguishable because it relates to hardware structures, not software algorithms. As the undisputed *WMS Gaming* line of cases shows, computer software-implemented means-plus-function claims must disclose the corresponding algorithm, a requirement not applicable to the hardware circuits at issue in *Telcordia*.

Since the purely functional "hashing" language disclosed in the specification is not a specific algorithmic structure under 35 U.S.C. § 112 ¶ 6, claims 1 and 5 are indefinite.

C. Bedrock Fails To Identify A Specific Algorithm Corresponding To The "Hashing Means"

Bedrock concedes that the function of the claim limitation is "using hashing to provide access to records stored in a memory of the system," yet it claims that "using hashing" is not a requirement

³ Using the same "cure for cancer" example, merely stating that "typical treatments include surgery, chemotherapy, and immunotherapy" would not disclose the requisite algorithm necessary to avoid indefiniteness, because such a generic statement says nothing about what combination or series of treatments actually were found by the inventor to cure cancer.

of the function. (Opp. 4-5.) Bedrock's convoluted attempt to read "using hashing" out of the "hashing means" does not pass the straight-face test and should be rejected. Indeed, Bedrock's own description of the technology contradicts its argument: "the '120 patent's solution and claims are directed to a specific type of information storage and retrieval system—namely, one that (i) uses a hashing technique and (ii) uses external chaining." (Dkt. 275 at 1 (emphasis added).) Because the specification does not disclose a hashing algorithm, as explained above, there is no specific algorithm in the specification corresponding to the function "using hashing." Bedrock's expert, Dr. Jones, concedes that "hashing" does not convey any particular structure. (Jones Dep. at 176:8-15.) Consequently, claim 5, which includes the "hashing means" limitation, is indefinite.

D. Bedrock Fails To Identify A Specific Algorithm Corresponding To The "Means For Dynamically Determining Maximum Number"

The parties agree that claims 2 and 6 require "dynamically determining maximum number of records for the record search means to remove." Bedrock argues that the corresponding structure is software instructions which "choose[] whether to execute the Search Table Procedure or the Alternate Version of Search Table Procedure" as disclosed in Column 6 line 56 through Column 7 line 15. (Opp. at 7-8.) However, the portion of the specification identified by Bedrock is not linked to the function of "dynamically determining a maximum number of records to remove" and does not provide any algorithm as sufficient structure to the claimed function. Claims 2 and 6 are indefinite.

The Search Table Procedure removes every expired record it encounters while traversing the linked list until the end of the list is reached. (Mot. at 9-10.) The Alternate Version of Search Table Procedure removes every expired record it encounters while traversing a linked list until the record being searched for is located. (*Id.*) Bedrock's expert, Dr. Jones, confirmed that neither Procedure calculates a maximum number of records to remove. (Jones Dep. at 158:6-12; *see also* Mot. at 9-10) Thus, a "choice" between whether to execute the Search Table Procedure or the Alternate Version of

Search Table Procedure is not a determination of a maximum number of records to remove and is not clearly linked to the claimed function of determining a maximum number to remove.

Further, even assuming that the two Procedures are somehow related to determining a maximum number of records to remove, the specification does not provide any algorithm for determining the maximum number, dynamically or otherwise. The so-called "choice" is disclosed as a "decision that might be based on factors such as, for example, how much memory is available in the system storage pool, general system load, time of day, the number of records residing in the information system, and other factors both internal and external to the information storage and retrieval system." ('120 Patent at 7:5-10). At most, one of ordinary skill in the art would know how to create an algorithm to calculate a maximum number of records to remove based on factors internal or external to the system. But that is insufficient structure for a means-plus-function claim:

[a] patentee cannot avoid providing specificity as to structure on a means-plus-function limitation simply because someone of ordinary skill in the art would be able to devise a means to perform the claimed function; to allow that form of claiming would allow the patentee to claim all possible means of achieving a function. To allow that form of claiming under section 112, paragraph 6, would allow the patentee to claim all possible means of achieving a function.

Blackboard, 574 F.3d at 1385. *See also* Jones Dep. at 203:18-206:4 (testifying that, in his opinion, the number of possible algorithms is on the order of 2^{32} , over 4 billion).

Accordingly, no algorithm is disclosed in the specification that dynamically determines a maximum number of records to remove.

III. CONCLUSION

For the foregoing reasons, Defendants respectfully request that the Court grant Defendants' motion for summary judgment of indefiniteness as to claims 1, 2, 5, and 6 of the '120 patent.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing document was filed and served electronically on all counsel of record in compliance with Local Rule CV-5(a) on October 1, 2010.

By: /s/ Antonio Sistos