

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

**UNILOC USA, INC., UNILOC LUXEMBOURG S.A.,
*Appellants***

v.

**SEGA OF AMERICA, INC., UBISOFT, INC., KOFAX,
INC., CAMBIUM LEARNING GROUP, INC.,
*Appellees***

2016-2000

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in Nos. IPR2014-
01453, IPR2015-01026.

Decided: October 23, 2017

DANIEL LUKE GEYSER, Stris & Maher LLP, Los Angeles, CA, argued for appellants. Also represented by DOUGLAS D. GEYSER, Dallas, TX.

ERIC ALLAN BURESH, Erise IP, P.A., Overland Park, KS, argued for appellees. Also represented by MICHELLE LYONS MARRIOTT.

Before PROST, *Chief Judge*, REYNA and HUGHES,
Circuit Judges.

PROST, *Chief Judge*.

Appellants Uniloc USA, Inc., and Uniloc Luxembourg S.A. (collectively, “Uniloc”) appeal from a final written decision from two consolidated inter partes reviews (“IPR”) holding that claims 1–20 of U.S. Patent No. 5,490,216 are unpatentable for being anticipated and obvious. In particular, Uniloc argues that the Patent Trial and Appeal Board (“Board”) erred in its priority analysis and that the submitted reference does not disclose certain claim elements. Because we conclude that the Board did not commit any legal or factual errors in its analysis, we affirm.

I

A

The ’216 patent, entitled “System for Software Registration,” is directed to “[a] registration system [that] allows digital data or software to run” without restriction, “only if an appropriate licensing procedure has been followed.” ’216 patent Abstract. An algorithm on the user’s computer combines certain user information to generate a “local” ID that is unique to the user. *Id.* at col. 5 ll. 61–67. The same process is duplicated at a registration server for the program’s licensor using the same user information and algorithm to create a “remote” ID. *Id.* at col. 6 ll. 1–8. These two IDs are compared and if they match, the program enters a “use mode” where that program can be accessed without restrictions. *Id.* at figs. 2a–2c. If they do not match, the program enters into a “demo mode,” in which certain features are disabled. *Id.* at col. 6 ll. 42–52.

Claim 1 is illustrative:

1. A registration system for licensing execution of digital data in a use mode, said digital data executable on a platform, said system including

[a] local licensee *unique ID generating means* and remote licensee *unique ID generating means*,

[b] said system further including *mode switching means* operable on said platform which permits use of said digital data in said use mode on said platform only if a licensee unique ID first generated by said local licensee unique ID generating means has matched a licensee unique ID subsequently generated by said remote licensee unique ID generating means; and

[c] wherein said remote licensee unique ID generating means comprises software executed on a platform which includes the [sic] algorithm utilized by said local licensee unique ID generating means to produce said licensee unique ID.

Id. at col. 13 l. 54–col. 14 l. 1 (emphases added).

The '216 patent was filed on September 21, 1993, and claims priority to two separate Australian provisional patent applications: PL4842 filed September 21, 1992, and PL5524 filed October 26, 1992. The '216 patent added certain new matter that was not included in the Australian provisionals. It issued on February 6, 1996.

B

In a separate case, Uniloc sued Microsoft Corporation in 2003 for allegedly infringing the '216 patent. *Uniloc USA, Inc. v. Microsoft Corp.*, 447 F. Supp. 2d 177, 180 (D.R.I. 2006) (“*Uniloc I*”), *vacated in part*, 290 F. App'x 337 (Fed. Cir. 2008) (“*Uniloc II*”). During that litigation, the district court construed the “generating means” term pursuant to 35 U.S.C. § 112, ¶ 6. *Id.* at 190–91. The district court found that the term’s function was “to

generate a local or remote licensee unique ID/registration key,” and that its structure was “a summation algorithm or a summer and equivalents thereof.” *Id.* at 190. In deriving the structure, the district court concluded that the “only algorithm” in the ’216 patent for generating a licensee unique ID is found in the sixth embodiment, which states:

The algorithm, in this embodiment, combines by addition the serial number 50 with the software product name 64 and customer information 65 and previous user identification 22 to provide registration number 66.

Uniloc I, 447 F. Supp. 2d at 192 (quoting ’216 patent, col. 11 ll. 53–56). We remanded that case on other grounds. *Uniloc II*, 290 F. App’x at 344. On appeal from that remand, we endorsed the district court’s construction and noted that “the summation structure was derived” from the sixth embodiment. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1304 (Fed. Cir. 2011) (“*Uniloc III*”). It is undisputed that this portion of the specification was new matter added in the ’216 patent and was not contained in either of the Australian provisionals.

C

In this case, Appellees Sega of America, Inc., Ubisoft, Inc., Kofax, Inc., and Cambium Learning Group, Inc., (collectively, “Appellees”) filed an IPR with the Board challenging all claims of the ’216 patent. The Board instituted IPR proceedings on all claims and found them unpatentable.

In its final written decision, the Board adopted the district court’s construction of the “generating means” term from *Uniloc I* and found that the term encompassed the structure of “a summation algorithm or a summer and equivalents thereof.” J.A. 8, 10. The Board then analyzed whether the Australian provisionals provide written

description support for the “generating means” term by reviewing if they “necessarily disclose” or “reasonably convey” a “summation algorithm or a summer and equivalents thereof.” J.A. 13. The Board concluded that the provisionals do not disclose this structure and that the asserted claims were not entitled to claim priority to those provisionals. J.A. 20. The Board then performed a novelty analysis and determined that claims 1–11 and 17–20 were anticipated by U.S. Patent No. 5,509,070 (“Schull”) entitled “Method for encouraging purchase of executable and non-executable software” and filed on December 15, 1992.¹

On appeal, Uniloc challenges the Board’s priority and anticipation determinations. In particular, Uniloc argues that the Board erred by applying the wrong legal standard in its priority analysis. According to Uniloc, the provisionals only need to satisfy 35 U.S.C. § 112, ¶ 1 to meet the written description requirement, but the Board improperly required that the provisionals satisfy § 112, ¶ 6 as well. Uniloc also argues that Schull does not teach “generating means” because it fails to disclose a summation algorithm. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

II

A

Under pre-AIA 35 U.S.C. § 120, a patent may claim priority to a provisional application so long as the provisional application satisfies “the first paragraph of section 112 of this title.” The first paragraph of § 112 requires, in relevant part, that “[t]he specification . . . contain a written description of the invention.” A disclosure satisfies the written description requirement if it “reasonably

¹ The Board invalidated claims 12–16 on other grounds, none of which are challenged here.

conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (2010) (en banc). And “[o]ne shows that one is ‘in possession’ of *the invention* by describing *the invention, with all its claimed limitations*, not that which makes it obvious.” *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997).

The claims here are drafted in means-plus-function format and their scope is governed by § 112, ¶ 6. Under ¶ 6, claimed subject matter may be “expressed as a means or step for performing a specified function without the recital of structure” but “such claim shall be construed to cover the corresponding structure . . . described in the specification.” We have previously explained that such means-plus-function claim limitations “comprise not only the language of the claims, but also the structure corresponding to that means that is disclosed in the written description portion of the specification (and equivalents thereof).” *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1381–82 (Fed. Cir. 1999).

Whether a priority document contains sufficient disclosure under § 112, ¶ 1 is a question of law that we review de novo. *Utter v. Hiraga*, 845 F.2d 993, 998 (Fed. Cir. 1988). However, “compliance with the written description aspect of that requirement is a question of fact” that we review for substantial evidence. *Id.* In conducting this inquiry, “[t]he fact finder must determine if one skilled in the art, reading the original specification, would immediately discern the limitation at issue in the parent.” *Waldemar Link v. Osteonics Corp.*, 32 F.3d 556, 558 (Fed. Cir. 1994).

Uniloc here argues that the Board erred in its priority analysis because it did not look for a disclosure that would “reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as

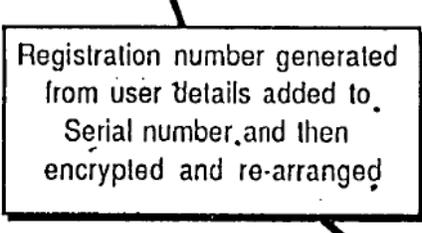
of the filing date” in the Australian provisionals. *Ariad*, 598 F.3d at 1351. Instead, Uniloc contends that the Board “looked myopically at whether *specific structure* was disclosed in the provisionals,” which “may answer the question posed by *paragraph six* of Section 112, but not paragraph one.” Appellants’ Br. 12. We disagree.

The Board proceeded through the proper analysis for determining priority. When determining priority, the Board must first construe the relevant claim terms. *X2Y Attenuators, LLC v. Int’l Trade Comm’n*, 757 F.3d 1358, 1365 (Fed. Cir. 2014) (“Where the claims have not been properly construed, the full scope of the claim is unknown, thereby rendering baseless any determination of written support in an earlier patent.”). After construing the claims, the Board determines if the original disclosure “describ[ed] *the invention, with all its claimed limitations*,” *Lockwood*, 107 F.3d at 1572, to show “possession of the claimed subject matter as of the filing date,” *Ariad*, 598 F.3d at 1351.

Here, the Board first construed the “generating means” term as encompassing the function “to generate a local or remote licensee unique ID” and the structure “a summation algorithm or a summer and equivalents thereof.” J.A. 10. As noted earlier, the Board adopted this construction from *Uniloc I* and neither party challenges this construction. In construing the “generating means” term, the Board also determined that the sixth embodiment of the ’216 patent discloses the structure for this term. And it is undisputed that this embodiment was new matter added to the ’216 patent and was not included in the Australian provisionals.

Even though the Australian provisionals do not include the sixth embodiment, the Board reviewed the provisionals to determine if they describe the structure in a different part of the disclosure. J.A. 13–20. Appellants argued, both to the Board and on appeal here, that the

provisionals disclose a summation algorithm by teaching that the “registration number algorithm *combines information* entered by a prospective registered user unique to that user with a serial number generated from information provided by the environment in which the software to be protected is to run.” J.A. 199 (emphasis added). Uniloc also argues that figure 2B in the provisionals, shown below, discloses a summation algorithm by stating that the “[r]egistration number” is “generated from user details *added to* Serial number.” J.A. 208.



Registration number generated
from user details added to
Serial number and then
encrypted and re-arranged

The Board reviewed these arguments and was unpersuaded. We too are not convinced.

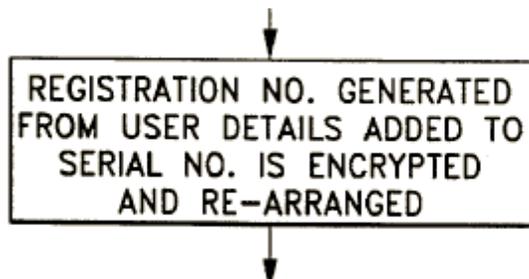
In its final written decision, the Board determined that the provisionals’ disclosure of an algorithm that “combines information” and of a registration number that is “generated from user details added to” the serial number is insufficient for one skilled in the art to “immediately discern,” *Waldemar Link*, 32 F.3d at 558, a summation algorithm. J.A. 16–17. This finding is supported by substantial evidence. As the Board explained, the Appellees’ expert testified “that there are a number of different ways to combine letters and numbers without mathematical addition.” J.A. 18–19. The expert further testified that to non-mathematically combine or add information, “you could put a code for the different digits and scramble them up. You could take portions of each and try to create another registration number. You could use different operations in different ways.” J.A. 19. The Board also relied on the expert’s testimony that the word “add” does

not necessarily mean “sum” because it can also describe “adding a redundancy” or “add[ing] a header.” *Id.*

Further, figure 2B and the text that Uniloc points to in the provisionals is also present in the '216 patent. Specifically, the '216 patent recites that:

Preferably, the registration number algorithm *combines information* entered by a prospective registered user unique to that user with a serial number generated from information provided by the environment in which the software to be protected is to run (e.g., system clock, last modify date, user name).

'216 patent col. 4 ll. 6–11 (emphasis added). And, figure 2b, copied below, states that the “registration no. [is] generated from user details added to serial no.”



Despite these disclosures, the district court found, and we confirmed, that only the sixth embodiment of the '216 patent provides the structural support for the “generating means” term. *See Uniloc I*, 447 F. Supp. 2d at 192 (noting that the “only algorithm specified in the '216 Patent for generating a licensee unique ID is found in the sixth embodiment”); *Uniloc III*, 632 F.3d at 1304 (confirming that “the summation structure was derived” from the sixth embodiment).

Accordingly, the Board here proceeded through the proper analysis for determining priority by first construing the means-plus-functions claims under § 112, ¶ 6, and

then determining if the original disclosure “describ[ed] *the invention, with all its claimed limitations,*” *Lockwood*, 107 F.3d at 1572, under § 112, ¶ 1. Because substantial evidence supports the Board’s finding that the provisionals do not disclose a summation algorithm, we agree with the Board that the ’216 patent may not claim priority to the Australian provisionals.²

B

Uniloc next argues that even if Schull does predate the ’216 patent, Schull does not anticipate the ’216 patent because it fails to disclose a “generating means.” As noted above, claim 1 of the ’216 patent recites a “local licensee *unique ID generating means* and remote licensee *unique ID generating means.*” The Board construed “generating means” as encompassing the function “to generate a local or remote licensee unique ID” and the structure “a summation algorithm or a summer and equivalents thereof.” J.A. 10. Uniloc argues that Schull fails to disclose this structure. We disagree.

Schull discloses a system that allows a user to access advanced features of software only with a valid password. Schull at Abstract. It describes a password-generating algorithm that locally generates a “Passwordable ID” by concatenating a Program ID, Feature ID, and Target ID. *Id.* at col. 5 ll. 20–33, col. 7 ll. 10–27, col. 9 ll. 5–9. Schull also discloses that the “Passwordable ID” can include two digits that constitute a “checksum for the preceding digits.” *Id.* at col. 7 ll. 28–36.

² The parties also dispute whether the Australian provisionals provide written description support for the “mode switching means” term. Because we conclude that the provisionals do not provide written description support for the “generating means” term, we need not address this alternate argument.

The same password-generating algorithm is performed at a Licensing Processor, and is transmitted to the user's processor and stored. *Id.* at col. 11 ll. 8–13, 35–40, 51–54; col. 6 ll. 6–11. A password validation check compares the generated “Passwordable ID” to the stored password and if there is a match, the advanced features of the software are unlocked. *Id.* at col. 5 ll. 40–47.

In its final written decision, the Board found that Schull's disclosure of concatenating the three IDs as well as its disclosure of the two-digit checksum each independently discloses a summation algorithm. J.A. 26–31. Substantial evidence supports the Board's finding that at least the checksum discloses a summation algorithm. We accordingly do not reach whether the concatenation also discloses a summation algorithm.

In relevant part, Schull teaches that:

In addition, to ensure error-checking when the Passwordable ID is transmitted to the central computer (80), it is desirable that a Passwordable ID satisfy some kind of coherence constraint such that the misreport of a single digit can be detected. One coherence constraint would be to append two more digits to the ID which would constitute a checksum for the preceding digits. Thus an error would be detected when the checksum and the preceding digits were inconsistent.

Id. at col. 7 ll. 28–36. The Board credited Appellees' expert's testimony that “[a]s of 1992, using a checksum to detect an error in a number, as described by Schull, was done using what is known as a ‘check digit,’ and all of the methods for calculating check digits utilize some form of addition.” J.A. 30 (internal alterations omitted). The Board also relied on Uniloc's expert's testimony that most checksums use addition and that he had never created a checksum that did not use summation. *Id.*

Uniloc argues that the disclosed checksum does not perform the function of “generat[ing] a local or remote licensee unique ID” because the checksum is appended to the ID and therefore is not a part of the ID. Uniloc does not cite any expert testimony or other basis for this argument. *See* Appellant’s Br. 46. Because Uniloc’s argument was not supported by any evidence, the Board properly relied on Appellees’ expert’s testimony and its reading of Schull to find that the checksum appended to the Passwordable ID became a part of that ID. Uniloc also argues that the Board did not give enough weight to its expert’s testimony that it is possible to perform a checksum using tables instead of addition. Uniloc is essentially asking us to reweigh the evidence, which we cannot do. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

III

In sum, we conclude that the Board applied the proper legal standard in determining the priority date of the ’216 patent. We further conclude that the Board’s finding that the ’216 patent is not entitled to claim priority to the Australian provisionals is supported by substantial evidence. Finally, we conclude that Schull discloses the “generating means” term and therefore anticipates the ’216 patent.

Accordingly, the judgment of the Board is affirmed.

AFFIRMED