United States Court of Appeals
for the Federal Circuit

MFORMATION TECHNOLOGIES, INC., AND
MFORMATION SOFTWARE TECHNOLOGIES, INC.,
Plaintiffs-Appellants,

v.

RESEARCH IN MOTION LIMITED AND
RESEARCH IN MOTION CORPORATION,
Defendants-Appellees.

2012-1679, 2013-1123

Appeals from the United States District Court for the Northern District of California in No. 08-CV-4990, Judge Edward M. Chen.

Decided: August 22, 2014

EDWARD R. REINES, Weil, Gotshal & Manges LLP, of Redwood Shores, California, argued for plaintiffs-appellants. With him on the brief were TIMOTHY C. SAULSBURY and DEREK C. WALTER. Of counsel was THOMAS J. FRIEL, JR., Cooley LLP, of San Francisco, California.

PATRICK F. PHILBIN, Kirkland & Ellis LLP, of Washington, DC, argued for defendants-appellees. With him on

the brief were LINDA S. DEBRUIN and MEREDITH ZINANNI, of Chicago, Illinois.

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

PROST, *Chief Judge.*

Plaintiffs-Appellants Mformation Technologies, Inc. and mFormation Software Technologies, Inc. (collectively, "Mformation") appeal the grant of judgment as a matter of law ("JMOL") by the United States District Court for the Northern District of California that Defendants-Appellees Research In Motion Limited and Research In Motion Corporation (collectively, "BlackBerry[1]") do not infringe U.S. Patent No. 6,970,917 ("'917 patent"). *See Mformation Techs., Inc. v. Research in Motion Ltd.*, No. C08-04990, 2012 WL 3222237 (N.D. Cal. Aug. 8, 2012). Because the district court correctly found that there was no legally sufficient evidentiary basis on which a reasonable jury could have found that BlackBerry infringes the asserted claims of the '917 patent, we affirm.

I. BACKGROUND

mFormation Software Technologies, Inc. ("MST") currently owns the rights to the '917 patent, which discloses the wireless activation and management of an electronic device without the need to have physical access to the device. '917 patent col. 1 ll. 54-57. Such a feature is useful because many businesses request that their employees use smartphones to store and transmit sensitive

---

[1]   Research In Motion Limited and Research In Motion Corporation have changed their names to BlackBerry Limited and BlackBerry Corporation, respectively. *See* Appellees' Mot. for Recons. of Ct.'s Nov. 21, 2013 Order 1, ECF No. 57.

information.   Should an employee lose his or her
smartphone, the '917 patent discloses a way to remotely
delete the sensitive data. The '917 patent also discloses
methods to remotely deploy software updates and trouble-
shoot. *Id.* at col. 2 ll. 37-44. And it provides for the
completion of these tasks without the need for a constant
connection or an initial activation. *Id.* at col. 2 ll. 52-56.

Representative claim 1 reads as follows:

1. A method for remotely managing a wireless
device over a wireless network comprising a serv-
er and the wireless device, the wireless network
operable to communicatively connect the server
and the wireless device, the method comprising
the steps of:

transmitting registration information relating
to the wireless device from the wireless
device to the server;

verifying the registration information at the
server; and

without a request from the wireless device,
performing the steps of:

establishing a mailbox for the wireless device
at the server,

placing a command for the wireless device in
the mailbox at the server,

delivering the command from the mailbox at
the server to the wireless device *by estab-
lishing a connection between the wireless
device and the server*, transmitting the
contents of the mailbox from the server to
the wireless device, and accepting the con-
tents of the mailbox at the wireless device,
and

> executing the command at the wireless device;

> *wherein the connection is established based on
> a threshold condition.*

'917 patent col. 7 ll. 21-44 (emphases added).

BlackBerry makes and sells BlackBerry handheld wireless devices. BlackBerry also markets its Blackberry Enterprise Server ("BES") software that allows its corporate customers to deliver e-mail and other data to their employees' BlackBerry devices. Additionally, the BES software allows companies to remotely manage their employees' devices. The BES software is installed on a company server and communicates with a BlackBerry device by sending data in packets over the cheapest available network. If the BlackBerry device is connected via Wi-Fi, the command is sent over that channel; otherwise, the command is sent (at a greater cost) over a cellular network. Regardless of which network is selected, all communications between the BES software on the server and a BlackBerry device are sent using an additional proprietary Gateway Message Envelope ("GME") protocol.

II. PROCEDURAL HISTORY

On October 31, 2008, Mformation Technologies, Inc. ("MT") filed this patent infringement suit against BlackBerry. At the time, MT owned all rights to the '917 patent. Appellants' Mot. to Substitute Parties 2, ECF No. 22. Following a claim construction hearing, the district court (Judge James Ware, presiding) construed the "establishing a connection between the wireless device and the server" sub-step to mean "initiating wireless communication between a wireless device and the server." J.A. 88. All parties agreed that the "wherein the connection is established based on a threshold condition" limitation applies to this sub-step.

On July 13, 2012, a jury found that there was infringement of all asserted claims of the '917 patent and returned a verdict of $147.2 million in favor of MT.

On July 17, 2012, the district court issued an order requesting further briefing in support of the parties' post-trial motions. In its order, the district court explained that the "establishing a connection" sub-step must be completed before the "transmitting the contents of the mailbox" sub-step can commence. In view of that statement, BlackBerry renewed its JMOL motion, arguing that MT did not present evidence that a connection is completely established before the start of the "transmitting" sub-step. The district court granted BlackBerry's motion, overturning the verdict, and granted BlackBerry's conditional motion for a new trial.

MT also moved for a new trial, alleging that the district court had changed the claim construction of the "establishing a connection" sub-step post-verdict to require an order-of-steps, i.e., that the connection be completely established before transmission. MT argued that such a requirement is both missing from the claims and was not presented to the jury.

A few days after granting JMOL, Judge Ware retired. The case was reassigned to Judge Edward M. Chen. In denying MT's motion for a new trial, Judge Chen acknowledged that Judge Ware had issued refinements to the claim construction after trial but declined to find that Judge Ware had altered the claim construction. Judge Chen also awarded BlackBerry costs in the amount of $206,363.28. MT filed an appeal to this court on September 6, 2012.

On September 21, 2012, MT assigned all rights to the '917 patent to MST, including the claims and causes of action at issue in this appeal. However, MST "expressly [did] not assum[e] or in any manner whatsoever becom[e] liable or responsible for any liabilities or

obligations of or related to Mformation Technologies, Inc." Appellants' Mot. to Substitute Parties 2, ECF No. 22. MST then filed a separate appeal to this court, Appeal No. 13-1123.

We consolidated both appeals, and the parties each filed motions: BlackBerry requested dismissal of the consolidated appeal, arguing that MST lacked standing, while MST requested to be substituted as the sole Appellant. We granted a limited remand so that the district court could rule on the motions. *See* Order 3, ECF No. 47. The district court then granted MST's "Motion to Join as a Co-Plaintiff," which was MST's alternative request if it could not be substituted. The district court explained that it joined MST rather than making a substitution because MT still owes costs in the amount of $206,363.28, and the agreement between MT and MST may not transfer that liability to MST. *See* Order Granting MST's Mot. to Join as Co-Pl. at 6, *Mformation Techs., Inc. v. Research in Motion Ltd.*, No. C08-04990 (N.D. Cal. Aug. 29, 2013), ECF No. 1162.[2]

---

[2]   Following the district court's order, BlackBerry again requested that we terminate Mformation's appeal due to lack of standing. *See* Appellees' Mot. for Recons. of Ct.'s Nov. 21, 2013 Order, ECF No. 57. But as we have previously stated, "[a]ppellate joinder under Fed. R. Civ. P. 21 is sanctioned by both the Supreme Court and the Ninth Circuit, which is the source of the procedural law that governs this non-patent issue." *Mentor H/S, Inc. v. Med. Device Alliance, Inc.*, 244 F.3d 1365, 1373 (Fed. Cir. 2001). And the Ninth Circuit has permitted appellate joinder of a plaintiff to retroactively cure a jurisdictional defect. *See Cal. Credit Union League v. City of Anaheim*, 190 F.3d 997, 1001 (9th Cir. 1999). Therefore, we deny BlackBerry's motion.

We have jurisdiction pursuant to 28 U.S.C.
§ 1295(a)(1).

III. STANDARDS OF REVIEW

We review JMOL decisions from the Northern District
of California under the Ninth Circuit's de novo standard.
See Hewlett-Packard Co. v. Mustek Sys., Inc., 340 F.3d
1314, 1318 (Fed. Cir. 2003). JMOL is proper only where
"the evidence, construed in the light most favorable to the
nonmoving party, permits only one reasonable conclusion,
and that conclusion is contrary to the jury's verdict."
Pavao v. Pagay, 307 F.3d 915, 918 (9th Cir. 2002) (citation
omitted).

Claim construction is a question of law that we review
de novo. *Lighting Ballast Control LLC v. Philips Elecs. N.
Am. Corp.*, 744 F.3d 1272, 1276-77 (Fed. Cir. 2014) (en
banc).

IV. DISCUSSION

This appeal concerns Mformation's challenges to the
district court's grant of JMOL of no infringement. First,
Mformation argues that the district court improperly
introduced a new post-verdict claim construction which
added an order-of-steps claim requirement. Second,
Mformation argues that even if the district court did not
alter the claim construction post-verdict, its construction
was incorrect. Third, Mformation argues that JMOL is
improper even when relying on the district court's order-
of-steps requirement in the claim construction. We ad-
dress each of Mformation's challenges in turn.

A. The "Post-Verdict" Claim Construction

1. Waiver

As a preliminary matter, BlackBerry claims that
Mformation waived its right to argue that the district
court changed its claim construction post-verdict to re-
quire a connection to be completely established before

beginning transmission. To support its waiver argument, BlackBerry points to several statements that Mformation's counsel made on the record during and after trial.

For example, BlackBerry argues that when the district court pressed Mformation's counsel on whether Mformation had presented evidence that BlackBerry's products practice the "establishing a connection" sub-step, including "the 'wherein' clause, which requires that a connection be established, in the past tense," Mformation's counsel responded affirmatively. J.A. 15638. The district court then asked whether Mformation had presented evidence showing that the "wherein" clause "is done before the transmission of the command," and Mformation responded: "Absolutely, your Honor." *Id.*

Mformation responds by noting that "to be binding, judicial admissions must be unequivocal."[3] *Glick v. White Motor Co.*, 458 F.2d 1287, 1291 (3d Cir. 1972) (citations omitted). And when Judge Chen asked Mformation to clarify this statement, Mformation's counsel explained that it did not intend to concede such a point. *See* J.A. 17291 ("Your Honor, I -- what we conceded, at that point, was that there has to be a connection established before there is transmission, not before transmission can begin."). Therefore, Mformation maintains that this

---

[3]   BlackBerry has filed a motion to strike the portions of Mformation's reply brief that respond to BlackBerry's challenges of waiver. *See* Appellees' Mot. to Strike 4, ECF No. 74. After reviewing Mformation's opening brief, we conclude that Mformation does argue the district court erred in finding that Mformation made concessions below. *See* Appellants' Br. 61-62, ECF No. 38. We, therefore, deny BlackBerry's motion to strike portions of Mformation's reply brief.

statement, when considered in light of the further explanation provided to Judge Chen, was far from unequivocal.

We agree with Mformation. Since we conclude that Mformation did not waive its right to challenge whether the district court altered its claim construct post-verdict, we now address this argument on the merits.[4]

2. Whether the District Court Altered the Claim Construction

Mformation argues that the district court impermissibly added an order-of-steps claim requirement post-verdict in its JMOL opinion—i.e., a requirement that a connection must be completely established *before* the transmitting step begins. *See* J.A. 16783 ("[U]nder the Court's construction, a connection between the server and the wireless device must be established before transmission of a command is commenced."). However, according to Mformation, with respect to the "wherein the connection is established . . ." limitation, the district court only informed the jury that this limitation requires that the connection be *initiated* before transmitting. Thus, Mformation argues that the jury was told that transmitting could begin before the connection is fully established, as long as the connection is later completed. The record indicates that such a sequence is not only possible but also what indeed occurs with BES software.

Mformation also compares this case to *Hewlett-Packard*, where we concluded that the district court improperly broadened a claim construction post-verdict. 340 F.3d at 1320-21. In granting a new trial, we explained that "[w]hen issues of claim construction have not been properly raised in connection with the jury instructions, it is improper for the district court to adopt a new or

---

[4]   We have carefully considered BlackBerry's other waiver arguments, but we do not find them persuasive.

more detailed claim construction in connection with the JMOL motion." *Id.*

In response, BlackBerry argues that there was no change in the claim construction. It notes that the district court directed the jury in its instructions that the "'establishing a connection' sub-step must be completed before the 'transmitting the contents of the mailbox' sub-step can commence." J.A. 117-18. Further, BlackBerry argues that the district court's claim construction order construed the phrase "establishing a connection" in part to mean "initiating wireless communication between a wireless device and the server." J.A. 88. The district court also required in its claim construction order that "the 'establishing a connection' sub-step must be completed before the 'transmitting the content of the mailbox' sub-step can commence." J.A. 90.

To the extent the district court did clarify its earlier claim construction, BlackBerry claims that was not erroneous, as we have allowed district courts in the past to adjust constructions post-trial if the court merely elaborates on a meaning inherent in the previous construction. *See, e.g.*, *Cordis Corp. v. Boston Scientific Corp.*, 658 F.3d 1347, 1356 (Fed. Cir. 2011). Indeed, in *Cordis*, the district court construed the term "undulating" to mean "rising and falling in waves, thus having at least a crest and a trough." *Id.* at 1355. After a jury verdict for the plaintiff, the district court granted JMOL of non-infringement, clarifying that the "use of the plural 'waves' implies a change in direction," and thus that the construction could not be met by a single "U" shape. *Id.* We found no error in the district court's clarification of its construction of the term "undulating." *Id.* at 1357. Here, just as in *Cordis*, BlackBerry argues that the district court's JMOL order clarified a construction that was inherent in the jury instructions and claim construction order.

Finally, BlackBerry notes that even if there was a change in the claim construction, the district court correctly held it to be harmless.[5]

We agree with BlackBerry and, therefore, conclude that the district court did not change its claim construction post-verdict. Rather, the district court at most clarified its previous construction that was already present in the jury instructions. In the section of the jury instructions where the district court describes the "establishing a connection" sub-step, the district court explains that the use of the phrase "connection is established" found in the "wherein" clause means that a connection must not only be initiated, but must be "made by the server with the wireless device." J.A. 118. Then, in the next section, the instructions discuss the transmitting sub-step. *Id.* A logical reading of these instructions would be that the sub-step discussed in the first section of the jury instructions must be completed before moving on to the next section discussing a separate sub-step.

Further, we note that this case is very similar to *Cordis*. In *Cordis*, we stated that "[t]he district court's post-verdict elaboration on this point only clarified what was inherent in the construction. Doing so was not error; it merely made plain what . . . should have been obvious

---

[5]   BlackBerry has also moved to strike the portions of Mformation's reply brief that challenge the district court's holding that any purported change in the claim construction was harmless because Mformation allegedly failed to preserve that argument in its opening brief. Appellees' Mot. to Strike 4, ECF No. 74. However, after reviewing its opening brief, we conclude that Mformation did challenge this holding. *See* Appellants' Br. 61-62, ECF No. 38 (stating it was highly prejudicial for the district court to change its claim construction post-trial). Therefore, we deny BlackBerry's motion.

to the jury." 658 F.3d at 1356. This is also the case here, as the jury instructions explained that (1) the "wherein" clause was "a further limitation" on the "establishing a connection" sub-step; and (2) the phrase "is established" in that clause means that a "connection must not only be initiated, but must be made." J.A. 118. The jury instructions also explained that "[t]he 'establishing a connection' sub-step must be completed before the 'transmitting' . . . sub-step can commence." *Id.* It is inherent in those instructions that, to complete the "establishing a connection" sub-step, the connection must be "established," and that must happen before the transmitting sub-step begins.

Therefore, we conclude that the district court did not alter its claim construction.

B. The Order-of-Steps Requirement in the Claim Construction

We now turn to the issue of whether claim 1 of the '917 patent requires that a connection be completely established before transmission. As a general rule, "[u]nless the steps of a method [claim] actually recite an order, the steps are not ordinarily construed to require one." *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1342 (Fed. Cir. 2001) (citation omitted). However, a claim "requires an ordering of steps when the claim language, as a matter of logic or grammar, requires that the steps be performed in the order written, or the specification directly or implicitly requires" an order of steps. *TALtech Ltd. v. Esquel Apparel, Inc.*, 279 F. App'x 974, 978 (Fed. Cir. 2008); *see also Function Media, LLC v. Google, Inc.*, 708 F.3d 1310, 1320 (Fed. Cir. 2013) (concluding that a claim that recites "processing" an "electronic advertisement" necessarily indicates that "the creation of the ad must happen before the processing begins").

Below, the district court read an order-of-steps requirement into the claim, concluding that "before the

server can 'transmit' the command, it must first 'establish a connection'" that is used for transmitting. J.A. 89. The district court explained that, "[i]n the context of a network communication, the ordinary meaning of the phrase 'a connection' is 'a means of communication or transport.'" J.A. 87 (citing Webster's Ninth New Collegiate Dictionary 278 (1983)).

On appeal, Mformation challenges the district court's construction. It argues that the patentee's use of "ing" in "establishing a connection between the wireless device and the server" conveys that formation of the connection is in progress, rather than completed. And Mformation adds that the wherein clause does not specifically dictate when the connection must be established; it only requires that a connection eventually be established.

Further, the word "established" is distant from the "establishing a connection" sub-step. According to Mformation, this serves as evidence that completely establishing a connection is not required before transmission. *See Credle v. Bond*, 25 F.3d 1566, 1571 (Fed. Cir. 1994) (stating that "grammatical structure and syntax" of the claim can be important evidence for claim construction). Thus, Mformation claims that the point of the "wherein" limitation was to define the subset of factors that could trigger the establishment of the connection—not to create rigid step-ordering requirements.

BlackBerry responds that the result of performing the "establishing a connection" sub-step is necessarily that a connection is "established." And BlackBerry claims the presence of the "wherein" clause strongly reinforces that conclusion. According to BlackBerry, if the "establishing a connection" sub-step were not temporally distinct from the transmitting sub-step (and prior to it), there would be no reason to specify a separate sub-step for establishing a connection at all, as it is inherently part of transmitting a command.

BlackBerry also points to a passage in the specification that contains the only description of the "establishing a connection" sub-step:

> In particular, in step 408, a connection 516 is established between management agent 504, running on remotely managed device 502, and management server 508. *Upon connection 516 being established*, the commands that were stored in the mailbox 512 in step 406 are transmitted 518 to device 502.

'917 patent col. 6 ll. 32-38 (emphasis added).

We agree with the district court and BlackBerry that claim 1 requires that a connection be established before transmission. We are persuaded by BlackBerry's argument that the separate sub-step for establishing a connection would become "superfluous" if we concluded that a connection did not have to be established (completed) before transmission. That is because, under such construction of the claim, establishing a connection is necessarily encompassed in transmitting a command. *See Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 709 F.3d 1348, 1356-57 (Fed. Cir. 2013) (declining to adopt the appellants' proposed construction because it would render another limitation "superfluous"). Further, we note that other sub-steps in claim 1 inherently require an order-of-steps. As a matter of logic, a mailbox must be established before the contents of said mailbox can be transmitted. *See* Oral Arg. 12:52-14:30 *available at* http://www.cafc.uscourts.gov/oral-argument-recordings/12-1679/all ("You can't accept something before it's transmitted . . . this claim has at least some temporal limitations . . . ."). And while it is true that "we have 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," *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005)

(en banc) (citation omitted), we do note that our conclusion is consistent with the sole embodiment in the specification. *See* '917 patent col. 6 ll. 32-38.

C. The Grant of JMOL of No Infringement

Finally, Mformation argues that BlackBerry is not entitled to JMOL even if an order-of-steps requirement is read into the claims. Mformation argues that there is still substantial evidence of infringement because BlackBerry's BES software need not create the communication channel itself but, rather, could use an existing wireless communication channel. And Mformation claims to have presented ample evidence at trial that, before the start of the "transmitting" sub-step, the BES software selects an existing wireless communication channel that allows a server to communicate with a remote device. Consequently, Mformation claims that a reasonable juror could find that the accused products establish a connection between the BES software and the wireless device before commencement of the "transmitting" sub-step.

We disagree. As the district court noted, Mformation's expert based his infringement opinion on his understanding that the claims do not require a connection to be *established* between the server and the wireless device before transmission. Based on his mistaken view, Mformation's expert testified that the "establishing a connection" sub-step is satisfied by: (1) the BES software "packaging the command in the GME protocol"; and (2) a component of the BES software determining whether to transmit that GME message via cellular or Wi-Fi. J.A. 15463-64; *see also* J.A. 15011-13; J.A. 15226. However, both of these actions occur entirely within the BES software installed on a company server. *See, e.g.*, J.A. 15884-86; J.A. 16724. Neither preparing a GME message nor determining how to transmit that message results in establishing a connection between the BES software and a BlackBerry device, as the claim requires. In other

words, *selecting* a path for a wireless connection is not the equivalent of *establishing* a wireless connection.

We therefore conclude that substantial evidence does not support a jury verdict of infringement under the proper claim construction of the "establishing" sub-step. Because we affirm the district court's grant of JMOL of no infringement, we need not address its conditional grant of a new trial.

V. CONCLUSION

For the foregoing reasons, we affirm the district court's grant of JMOL of no infringement. MT and MST remain jointly and severally liable for the $206,363.28 in costs awarded below.

AFFIRMED