

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC.

Petitioner

v.

CARUCEL INVESTMENTS, L.P.

Patent Owner

Case No. IPR2019-01102

U.S. Patent No. 7,848,701

**PATENT OWNER'S REQUEST FOR
DIRECTOR REVIEW**

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I. INTRODUCTION

Pursuant to 37 C.F.R. § 42.71(d), Patent Owner, Carucel Investments L.P., respectfully requests review by the Director of the Board’s Final Written Decision (Paper 28, “FWD”), in which the Board determined all challenged claims, namely claims 10, 15–18, 31, and 33–35, of U.S. Patent No. 7,848,701 (the “’701 Patent”), unpatentable. Pursuant to the Supreme Court’s decision in *United States v. Arthrex, Inc.*, 141 S.Ct. 1970 (2021), such review must be conducted by a principal officer properly appointed by the President and confirmed through advice and consent of the Senate. This matter has been remanded to the Patent and Trademark Office for purposes of requesting such review. *See* Order at 3, *Carucel Investments L.P., v. Volkswagen Group of America, Inc.*, No. 2021-1731, -1734, -1735, -1736, (Fed. Cir., Sept. 13, 2021), *Carucel Investments L.P., v. Unified Patents, LLC*, No. 2021-1737 (Fed. Cir., Sept. 13, 2021).

Carucel submits that the FWD in this matter must be reviewed and rejected because the Board failed to apply a proper claim construction for several terms at issue. In construing, or choosing not to construe, several terms, the Board disregarded claim construction that was decided affirmed by the Federal Circuit and established a claim construction that is inconsistent with that affirmed by the Federal Circuit. *See Knowles Electronics LLC v. Cirrus Logic, Inc.*, 2016-2020 (Fed. Cir. 2018). As pointed out by Judge Newman, “[t]he purposes of efficiency, economy,

and finality of patent review are lost when judicial determination of the same question of patentability has been completed, including appeal to and decision by the Federal Circuit – yet the decision is ignored and the proceeding repeated by the administration agency and again appealed to the Federal Circuit.” *Knowles* at 5 (Fed. Cir. 2018) (Newman dissenting). This clear legal error requires the FWD to be vacated and is the exact type of error for which Director review is intended.

II. BACKGROUND

Carucel is a small, family-owned, limited partnership, whose sole assets are eight expired Mobile Communication System with Moving Base Station patents. The Carucel patents concern inventions by the family patriarch, Charles D. Gavrilovich, Sr., who passed away in July, 2015 after founding Carucel in 1999. He earned a M.S. in electrical engineering and had 39 years of experience in the field of telecommunications, working for leading companies, including Bell Labs, Lucent Technology, and Motorola.

The Carucel patents were the culmination of Mr. Gavrilovich’s life’s work. Mr. Gavrilovich invented a “mobile base station” that significantly improved wireless communications by acting as an intermediary between cell towers and mobile devices. The asserted claims of the ’023 Patent cover a movable base station or apparatus configured to provide important benefits to mobile devices, such as

smartphone, tablet and laptop users. In 1995, movable base stations like those patented by Mr. Gavrilovich did not exist.

Mr. Gavrilovich's inventive movable base station is a mobile wireless device that acts as an intermediary and provides connectivity between a cellular network and one or more mobile devices. It provides a communication path between the mobile devices and cellular network that increases the available data bandwidth and quality of wireless service, which in turn provides important, tangible benefits to consumers by enabling fewer dropped calls and higher data throughput. The inventive technology is now put in automobiles so that passengers of a car can listen to music or news, follow driving directions, watch streaming movies or play networked games (high bandwidth applications) on their tablets or other mobile devices while travelling.

At the time of the invention in 1995, conventional consumer cellular networks generally did not provide high bandwidth to mobile users. A significant technical challenge impeding high bandwidth was the "handoff" processing of connected mobile devices. "Handoff" is a term of art that describes the situation that occurs when a mobile device moves geographically from one cell to another within a cellular network. As the mobile device moves between cells, its communication link with the network may be dropped or disconnected unless it can be seamlessly "handed-off" from one cell tower base station to another to provide a continuous,

uninterrupted call or data link connection. Under the conventional scheme, the network and mobile devices are burdened with processing handoffs as the mobile devices move through cells of a cellular network. This burden increases and reliability declines with increases in the travel speed of the mobile devices as they move across cells, potentially becoming unmanageable, resulting in dropped connections, interruptions and poor service.

The claimed invention is directed toward a wireless communication device, such as a wireless router, that is configured to move relative to Earth. The wireless communication device includes a plurality of spatially separated antennas, a receiver configured to receive fixed port signals through the plurality of spatially separated antennas, and a transmitter configured to transmit radio frequency signals to a mobile device corresponding to the received fixed port signals.

III. LEGAL STANDARD

The Director's review is *de novo* and may address issues of fact or law or issues of particular importance to the Office or patent community. *See* <https://www.uspto.gov/patents/patent-trial-and-appeal-board/procedures/arthrex-qas> (last visited October 13, 2021).

IV. ARGUMENT

A. IN DETERMINING CLAIM CONSTRUCTION THE BOARD IGNORED A FINAL ADJUDICATION OF THE FEDERAL CIRCUIT

As recognized in the FWD, several terms found in the claims of the '904 Patent were also at issue in *Carucel Investments, L.P. v. Novatel Wireless, Inc.*, 16-cv-118 (S.D. Cal) ("Novatel"). In particular, the court in Novatel determined the proper construction of (i) "fixed port," (ii) "base station," (iii) "configured to," (iv) "transmit radio frequency signals that correspond to the mobile device signals." See Order at 8-20. Novatel resulted in a jury verdict of non-infringement that was affirmed by the Federal Circuit. *Carucel Investments, L.P. v. Novatel Wireless, Inc.*, 2017-2301 (Fed. Cir. 2018).

The Board chose not to construe either "fixed port" or "transmit radio frequency signals that correspond to the mobile device signals" stating that there was no need to construe the terms "for the purposes of this decision." FWD at 9-10.

Accepting the definition from Novatel, the Board construed "configured to" mean "constructed to move with the traffic at a rate of speed which is comparable to the speed of traffic." *Id.* Although this definition, on its surface, is the same as in Novatel, the Board disregarded the portion of Novatel that considered "configured to" as narrowing the scope of the claim due to a disclaimer in the specification. Ex. 2105 at 13-16.

Although the Board was aware of the Novatel claim construction, it nevertheless chose not to use the Novatel constructions and performed their own analysis. FWD at 9-22. By ignoring the questions of law that had already been settled

by the Federal Circuit, the Board disregards the principals of collateral estoppel, defeats the stated purpose of the America Invents Act, and puts Patent Owner in the unwinnable position of facing different claim constructions for infringement and invalidity.

The issue of claim construction is a question of law for the court to decide. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S.Ct. 831, 838 (2015). Treating claim construction as a question of law helps promote uniformity in the treatment of a patent through the application of stare decisis. *See Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390-91 (1996). The Federal Circuit has long recognized that the claim construction issues it rules on have substantial collateral estoppel impacts. *See Miken Composites, L.L.C. v. Wilson Sporting Goods, Co.*, 515 F.3d 1331, 1338 (Fed. Cir. 2008), *see also Key Pharm. v. Hercon Labs. Corp.*, 161 F.3d 709, 716 (Fed. Cir. 1998).

The Federal Circuit affirmed the district court's claim construction in Novatel, thus establishing, as a matter of law, how at least some of the terms in the patents at issue must be construed. As a practical matter, the principal of collateral estoppel would bar Carucel from asserting a conflicting construction of the same terms to support infringement of the claims in another litigation. This same collateral estoppel should prevent the PTAB from using a conflicting construction of the same terms to invalidate the claims.

The Board's position that the terms don't need construction or that the outcome of their analysis did not depend on a particular construction of a term ignores the fact that in doing their analysis, every limitation in the claim had to be analyzed and compared to the prior art. When petitioning for *inter partes* review, a petitioner is required to construe every claim and specify where each element of the claim is found in the prior art. 37 C.F.R. § 42.104. Clearly, the Board had to construe the claims to perform their analysis and their failure to construe certain terms in accordance with a settled question of law is grounds for vacating the FWD.

Failure to apply collateral estoppel also frustrates one of the purposes of the American Invents Act, namely to provide a more efficient determination of certain validity issues compared to the time and cost of litigation. These purposes are frustrated when a judicial determination of an issue is ignored and re-determined by the Board in a decision that will again be appealed to the Federal Circuit. *See Knowles* at 5.

For each of the terms had previously been construed in Novatel and were at issue in this proceeding, the Board either opted not to construe the term (in effect rejecting Patent Owner's narrower construction) or defined the term more broadly than in Novatel (by finding terms not limiting that were clearly found to be limiting in Novatel). Although any one of these terms taken alone may or may not be determinative, the cumulative effect of having previously narrowly construed terms

now be given broader constructions is that the claims are construed with a substantially broader scope by the Board than they were by the court in *Novatel*.

Thus, Carucel is in a situation where the claims were found to be not infringed under a narrow claim construction affirmed by the Federal Circuit and those same claims have now been found invalid based on a broader claim construction from the Board. Carucel now has to appeal the Board's decision to the Federal Circuit with the potential outcomes being (i) conflicting claim constructions approved by the Federal Circuit or (ii) the Board's decision being vacated and remanded. As warned by Judge Newman in *Knowles*, there are "significant legal and economic consequences of conflict between judicial ruling and agency decision, in which patent life and investment resources are consumed in duplicate litigation, with no reliable finality." *Knowles* at 10.

**B. AN OFFICER NOMINATED BY THE PRESIDENT AND
CONFIRMED BY THE SENATE MUST REVIEW THE FINAL
WRITTEN DECISION**

The USPTO currently does not have a Director or Acting Director that was nominated by the President and confirmed by the Senate. *Arthrex* reaffirmed that "the exercise of executive power by inferior officers must at some level be subject to the direction and supervision of an officer nominated by the President and confirmed by the Senate." *Arthrex*, 141 S. Ct. at 1988. Thus, under *Athrex*, this review must be performed by an appointed principal officer or the same Constitutional issue held to exist in *Arthrex* will remain.

IV. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Director, or other appointed principal officer, review and vacate the Final Written Decision or, at a minimum remand to the Board to address the foregoing errors by the Board in its Final Written Decision.

Date: October 13, 2021

Respectfully submitted,

/s/ R. Scott Rhoades

R. Scott Rhoades

Reg. No. 44,300

**CERTIFICATE OF COMPLIANCE WITH PAGE
LIMITATION OF 37 C.F.R. § 42.24(d)**

Pursuant to 37 C.F.R. § 42.24(d), the undersigned hereby certifies that Patent Owner's Request for Director Review complies with the page limits of 37 C.F.R. § 42.24(a)(1) as it contains no more than 15 pages, excluding the parts of this Patent Owner's Request for Director Review that are exempted by 37 C.F.R. § 42.24(a)(1).

Date: October 13, 2021

Respectfully submitted,

/s/ R. Scott Rhoades

R. Scott Rhoades

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e), the undersigned certifies that an electronic copy of the foregoing PATENT OWNER’S REQUEST FOR DIRECTOR REVIEW was served on the Petitioners by electronic mail on October 13, 2021:

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