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The Precedent: Applicant Admitted Prior Art Can Be Used to Fill Missing Claim Limitations in a § 103 Obviousness Analysis

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PUBLICATION | 11.5.2025

In this edition of *The Precedent*, we outline the decision in *Shockwave Med., Inc. v. Cardiovascular Sys.*

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Overview

In *Shockwave Med., Inc. v. Cardiovascular Sys.*, the Federal Circuit addressed the use of Applicant Admitted Prior Art (AAPA) in *inter partes* review (IPR).

Issue

Whether the use of AAPA in combination with prior art is allowable under 35 U.S.C. § 311(b)

Holding

Yes, AAPA can be used to show the general knowledge of a skilled artisan and the general knowledge of a skilled artisan can be used to meet a missing claim limitation under 35 U.S.C. § 311(b).

Background and Reasoning

Shockwave owns US Patent No. 8,956,371 (the “’371 patent”), which is directed to the treatment of atherosclerosis through intravascular lithotripsy. The claimed device is for a “typical over-the-wire angioplasty balloon catheter and adds electrodes and a pulse generator.”

Claim 5 claims “the catheter of claim 2, wherein the pair of electrodes is disposed adjacent to and outside of the guide wire lumen.” Cardiovascular Systems, Inc. (“CSI”) challenged claim 5 and other claims as unpatentable for obviousness. CSI’s primary reference was to European Patent Application Publication No. EP 0571306 A1 (“Levy”), which describes using laser generated pulses to disintegrate plaque in blood vessels. CSI also used the ’371 patent’s specification that disclosed

“typical prior art over-the-wire angioplasty balloon catheters.” In CSI’s petition for IPR, it proffered prior art combinations involving “Levy as modified by AAPA’ in combination with other prior art references.” The Patent Trial and Appeal Board (“the Board”) held that all the challenged claims were unpatentable for obviousness except for claim 5. Shockwave appealed and CSI cross appealed.

To determine the issue, the Federal Circuit first cited 35 U.S.C. §311(b), which states that “[a] petitioner in an *inter partes* review may request to cancel as unpatentable 1 or more claims of a patent only on a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications.” The Federal Circuit defined AAPA as “art referenced in a patent application that is admitted by the applicant to be prior art.” Here, Shockwave’s disclosure of “typical prior art over-the-wire angioplasty balloon catheters” in its application was considered a statement that “over-the-wire angioplasty balloon catheters” were known in the prior art.

The Federal Circuit stated that although AAPA cannot be the “basis” of a ground for an IPR, AAPA can evidence what is background knowledge for a skilled artisan. And this “general knowledge can be used to supply a missing claim limitation.”

The Federal Circuit held that the statement from the ’371 patent regarding over-the-wire balloon catheters was not the basis of the ground for the petition. Rather, “CSI used Levy as a primary reference” and “used AAPA only to show, as the ’371 patent itself acknowledged, that the over-the-wire angioplasty balloon catheter was well known in the prior art and that this general background knowledge satisfied the ’371 patent’s claim limitations relating to an over-the-wire configuration.”

Shockwave contended that AAPA served as a basis for the petition in the Board’s Final Written decision “because the Board’s Final Written Decision use[d] the word ‘basis’ in a table describing the list of prior art references.” The Federal Circuit disagreed, stating that the “basis” is evaluated by the petition, not what the Board states; and here, “CSI’s petition never phrased the AAPA in terms of constituting a basis for its obviousness arguments.”

Shockwave contended that “even if CSI did not expressly label its use of AAPA as evidence of general knowledge of an over-the-wire balloon catheter as a basis, in ‘substance’ it formed the basis of the IPR petition.” The Federal Circuit disagreed, stating that AAPA was used to show the general knowledge of a skilled artisan and this is allowable for supplying a missing claim limitation.