

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ABB, INC.
Petitioner

v.

ROY-G-BIV CORPORATION
Patent Owner

Cases IPR2013-00063
Patent 6,513,058 B2

Before THOMAS L. GIANNETTI, JENNIFER S. BISK, and
JEREMY M. PLENZLER, *Administrative Patent Judges*.

GIANNETTI, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. Background

This case is one of a series of *inter partes* reviews (IPRs) initiated by ABB, Inc. (“Petitioner”), challenging various patents owned by ROY-G-BIV Corp. (“Patent Owner”). In that connection, the Board has issued two final decisions in related proceedings: IPR2013-00062 (Paper 84, “the ’062 Decision”) and IPR2013-00074 (Paper 80). In addition, there is a related district court litigation between the parties in the Eastern District of Texas, captioned *ROY-G-BIV Corporation v. ABB, Ltd. et al.*, 6:11-cv-00622-LED (E.D. Tex.).

In this proceeding, Petitioner requested an *inter partes* review of claims 1-5 of U.S. Patent No. 6,513,058 B2 (Ex. 1001, “the ’058 patent”).¹ Patent Owner filed a Preliminary Response. Paper 22. The Board granted the Petition and instituted trial for claims 1-5. Paper 24. Although several grounds were proposed by Petitioner, the Board instituted trial on a single ground: obviousness over the combination of the Gertz, Stewart, and Morrow references discussed below.

During trial, Patent Owner filed a Response (“PO Resp.”) addressing the obviousness challenge, accompanied by an expert declaration from David B. Stewart, Ph.D. (Ex. 2013), author of the Stewart thesis relied upon by Petitioner. Paper 27. Petitioner filed a Reply (“Pet. Reply”) and, for the first time in this proceeding, presented expert testimony, namely,

¹ Initially Patent Owner filed an incorrect petition. Paper 4. A corrected petition (“Pet.”) was submitted as Exhibit 1032 to Petitioner’s motion to correct (Paper 8), which motion was granted by the Board. Paper 21. The references in this decision are to the corrected petition, Ex. 1032 (“Pet.”).

declarations from Richard Voyles, Ph.D. (Ex. 1130), and Nikolaos Papanikolopoulos, Ph.D. (Ex. 1132). Paper 38.

Petitioner's experts, Drs. Voyles and Papanikolopoulos, worked in the same laboratory at Carnegie Mellon University as Dr. Stewart, and were presented by Petitioner to rebut Dr. Stewart's expert testimony. Patent Owner also has filed a Motion to Exclude Evidence (Paper 45) and a Motion to Submit Supplemental Information (Paper 63). An oral hearing was held on February 27, 2014. A transcript of the hearing is included in the record as Paper 70 ("Transcript"). This Final Decision will refer to the Final Decision in IPR2013-00062 ("the '062 Decision") and will, in places, rely on the Board's analysis therein.

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a). For the reasons discussed below, we determine that Petitioner has not met its burden to prove by a preponderance of the evidence that claims 1-5 of the '058 patent are unpatentable.

B. The '058 Patent

The technology of the '058 patent is the same as that described in our '062 Decision at pages 3-4. The patent at issue there, U.S. Patent 6,516,236 ("the '236 patent"), is related to the '058 patent.² For the purposes of this Decision, therefore, we rely upon that prior description in the '062 Decision.

² The '236 patent is a continuation of U.S. Patent Application No. 09/191,181 (now abandoned). The '058 patent is a continuation-in-part of the same application.

C. Illustrative Claim

Claim 1 is reproduced below, with emphasis added:

1. A system for allowing an application program to communicate with any one of a group of supported hardware devices, the system comprising:

a software system operating on at least one workstation, the software system comprising

at least one application program comprising a set of *component functions* defining a desired motion sequence, the desired motion sequence being comprised of primitive operations that are necessary to define the desired motion sequence and non-primitive operations that may be simulated using a combination of primitive operations,

a core set of core driver functions, where each core driver function is associated with one of the primitive operations,

an extended set of extended driver functions, where each extended driver functions is associated with one of the non-primitive operations,

component code associated with each of the component functions, where the component code associates at least some of the component functions with at least some of the driver functions,

a set of software drivers, where each software driver is associated with one of the hardware devices and comprises driver code for implementing the driver functions, and

a control command generating module for generating control commands based on the component functions of the application program, the component code associated with the component functions, and the driver code associated with the software drivers; and

a network communication protocol that allows the control commands to be communicated from the control command generating module on the at least one workstation to at least one of the supported hardware devices over a network.

D. The Prior Art References Relied On By Petitioner

The following table identifies the Gertz, Stewart, and Morrow references referred to above:

Gertz	Matthew Wayne Gertz, <i>A Visual Programming Environment for Real-Time Control Systems</i> (Ph.D. dissertation, Carnegie Mellon University)	Nov. 22, 1994	Ex. 1002
Stewart	David Bernard Stewart, <i>Real-Time Software Design and Analysis of Reconfigurable Multi-Sensor Based Systems</i> (Ph.D. dissertation, Carnegie Mellon University)	Apr. 1, 1994	Ex. 1004
Morrow	J. Dan Morrow, Bradley J. Nelson, & Pradeep Khosla, <i>Vision and Force Driven Sensorimotor Primitives for Robotic Assembly Skills</i> , INST. FOR SOFTWARE RES., paper 574	Jan. 1, 1995	Ex. 1005

II. DISCUSSION

A. Antedating Gertz and Morrow

1. Background

As in IPR2013-00062 and IPR2013-00074, Patent Owner contends that the claimed invention of the '058 patent was conceived prior to November 22, 1994, before the earliest date of publication alleged for Gertz and Morrow, and constructively reduced to practice on May 30, 1995, the filing date of the "priority application" (serial no. 08/454,736) that led to the '058 patent. PO Resp. 6-12. Patent Owner further contends that the inventors were reasonably diligent from November 21, 1994, to the date of

the constructive reduction to practice. *Id.* at 12-14. Patent Owner contends that, as a consequence, neither Gertz nor Morrow qualifies as prior art. *Id.* at 14. *See* 35 U.S.C. § 102(g) (2011); *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1576 (Fed. Cir. 1996) (“Thus, under section 102(a), a document is prior art only when published before the invention date.”).

In support, Patent Owner relies here on the same declaration testimony of its founder, chairman, and chief technical officer, David W. Brown, and accompanying evidence that was relied on in IPR2013-00062 and IPR2013-00074. *See* Exs. 2012 through 2012-6.

2. *Discussion*

For the reasons discussed in the '062 Decision, we determine that the testimony and documents offered by Patent Owner are not sufficient to establish that the invention date of claims 1-5 is prior to the publication date of Gertz and Morrow. Mr. Brown's testimony is not sufficient as evidence of diligence and his own time records are inadequate as corroboration. '062 Decision 9-13.

The additional cases and arguments presented here by Patent Owner (Paper 54 (“PO Surreply”), 2-4) do not convince us otherwise. For example, *Ex Parte Hook*, 102 USPQ 130 (BPAI 1953), a non-precedential Board decision, concludes that the Examiner erred in holding that the averments made by the affiant in a Rule 131 affidavit must be corroborated. The case does not address the issue for which it is cited by Patent Owner, namely, whether independent corroboration is required “in court.” PO Surreply 2. In fact, *Hook* acknowledges that a different rule applies in litigation, distinguishing a decision relied on by the Examiner requiring corroboration

of inventor testimony because “this ruling was made in reference to testimony before the Court.” *Hook*, 102 USPQ at 131. *Lazare Kaplan Int’l v. Photoscribe Techs., Inc.*, 628 F.3d 1399 (Fed. Cir. 2010), also is distinguishable. In that case, there was independent evidence corroborating the testimony of the inventor (Gresser), including confirming testimony from Lazare’s senior vice president, as well as a video and photograph illustrating Gresser’s machine in operation. *Id.* at 1375. In *Adenta GmbH v. OrthoArm, Inc.*, 501 F.3d 1364 (Fed. Cir. 2007), unlike here, corroboration was provided by: “a number of statements made by different witnesses, all corroborating each other, accompanied by various supportive and consistent documents. The testimony of the witnesses together with the documentary evidence provided a coherent and convincing story.” *Id.* at 1371.

Patent Owner relies also on a number of district court decisions. We find these unpersuasive. For instance, in *Ritter v. Rohm & Haas Co.*, 271 F.Supp. 313 (S.D.N.Y 1967), a pre-Federal Circuit decision, the district court acknowledged that a split of authority on the requirement for independent corroboration existed before the Federal Circuit was formed: “We have found no case in [the Second Circuit] expressly dealing with the nature of the corroborative evidence required. Decisions elsewhere are split.” *Id.* at 320. The district court in *Ritter*, however, did not have the benefit of the Federal Circuit’s later guidance in such cases as *Mahurkar*, and, therefore, reached a different conclusion on the need for independent corroboration that is not reflective of the law as it stands today. *Sperry Prods., Inc. v. Aluminum Co. of Am.*, 171 F. Supp. 901 (N.D. Ohio 1959), is likewise a pre-Federal Circuit district court decision, and therefore is not persuasive authority today. Finally, in *Purdue Pharma L.P. v. Boehringer*

Ingelheim GmbH, 98 F.Supp.2d 362 (S.D.N.Y 2000), the district court relied on the declaration of Robert F. Kaiko to support a finding of reduction to practice of the '331 patent in suit. *Id.* at 385. Kaiko was not a named inventor of the '331 patent; in fact, the district court denied patent owner Purdue's motion to amend the patent to include Kaiko as an inventor on that patent. *Id.* at 384. Therefore, Kaiko's testimony was not inventor testimony requiring independent corroboration under *Mahurkar*.

3. *Morrow Publication Date*

At the final hearing, Patent Owner challenged the January 1, 1995, date of *Morrow*, asserting that Petitioner had not met its burden of proof that the reference was published on that date. Transcript 24-28. But Patent Owner acknowledged that it has not moved to exclude *Morrow*. *Id.* at 25. Instead, Patent Owner directed the Board to a footnote concerning *Morrow* in its Patent Owner Response. *Id.* at 26.

We have reviewed the record, including the cited footnote, and conclude that Patent Owner's challenge to *Morrow* is untimely. Patent Owner waited until final hearing to make this argument. The footnote cited by Patent Owner merely states that "Petitioner has not established the 1-1-1995 date on page 1 of *Morrow* is the publication date of reference." PO Resp., 9 n.2. It does not state an objection to the admissibility of the reference. *Morrow* was cited and discussed in the Petition (Ex. 1032, 20). Under our rules, an objection to such evidence must be served within ten business days of the institution of trial. 37 C.F.R. § 42.64(b)(1). Furthermore, Patent Owner never followed up with a motion to exclude, waiting instead until the final hearing to raise the issue again. *See* 37 C.F.R.

§ 42.64(c) (“A motion to exclude evidence must be filed to preserve any objection.”)

We recognize, as Patent Owner contends, that the burden of proving that Morrow is a prior art publication falls on Petitioner. On the other hand, a final hearing is not the place to advance a new theory of the case. Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,768 (Aug. 14, 2012) (“No new evidence or arguments may be presented in the oral argument.”) In light of our disposition of this proceeding, however, we do not need to reach the issues of whether the record evidence is sufficient to satisfy that burden, or whether a footnote reference amounts to a waiver of Patent Owner’s challenge to Morrow as a prior art publication. *See SmithKline Beecham v. Apotex Corp.*, 439 F.3d 1312, 1320 (Fed. Cir. 2006) (arguments raised in footnotes are waived). We are mindful, however, of the fact that Patent Owner did not challenge the January 1, 1995, publication date of Morrow in either IPR2013-00062 or IPR2013-00074.

B. Claim Construction

Consistent with the statute and the legislative history of the Leahy-Smith America Invents Act, the Board will interpret claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012); 37 C.F.R. § 42.100(b). Claims are to be given their broadest reasonable interpretation consistent with the specification, reading the claim in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

For purposes of this Decision, we construe only the terms “component function” and “component code” because these terms are determinative, for the same reasons as explained in the ’062 Decision.

1. *“component function”*

The parties present the same opposing views on the construction of this term as those discussed in the ’062 Decision at page 14. *See* PO Resp. 19; Pet. Reply 8. For the reasons set forth in the ’062 Decision at pages 14-15, we conclude that the broadest reasonable interpretation of the term “component function” requires an action carried out by a program or routine, regardless of whether the action is defined by executable code. This is consistent with the Specification of the ’058 patent, which explains that “[t]he application program 26 comprises a sequence of component functions arranged to define the motion control operations necessary to control a motion control device to move an object in a desired manner.” Ex. 1001, col. 7, ll. 54-58.

2. *“component code”*

The parties have the same disagreement on the construction of this term as that discussed in the ’062 Decision at page 15. *See* PO Resp. 20; Pet. Reply 8. For the reasons discussed in the ’062 Decision at pages 15-16, we determine that the term “component code” requires program instructions. This is consistent with the Specification of the ’058 patent, which explains that “the software system designer writes component code that associates at least some of the component functions with at least some of the driver functions.” Ex. 1001, col. 7, ll. 17-20.

C. Summary of Expert Testimony

As in IPR2013-00062, three experts—Drs. Stewart, Voyles, and Papanikolopoulos—testified in this case. Their declarations here are similar to those submitted in IPR2013-00062 which are discussed in the '062 Decision at pages 16-21. As the issues raised here relative to the component function and component code limitations are the same, we rely on that analysis for the purposes of this Decision.

D. Obviousness Based on Gertz, Stewart, and Morrow

Petitioner challenges claims 1-5 as being unpatentable under 35 U.S.C. § 103(a) based on the combination of Gertz, Stewart, and Morrow. Claim 2 depends from claim 1. Claims 3 and 4 are independent. Claim 5 depends from claim 4. All five claims contain the “component function” and “component code” limitations.

As discussed in the '062 Decision, we give significant weight to the testimony of Patent Owner's expert, Dr. Stewart, that actions in Gertz are not the same as the claimed component functions and that Gertz does not describe any code (i.e., the claimed component code) that associates component functions with driver functions, as claimed. '062 Decision 22-25. Petitioner does not provide sufficient evidence to rebut this testimony. Thus, as described below, we are not persuaded that Petitioner has established, by a preponderance of the evidence, that the combination of Gertz, Stewart, and Morrow renders claims 1-5 unpatentable under 35 U.S.C. § 103(a).

Similar to Petitioner's challenge to the patentability of claim 1 in IPR2013-00062, Petitioner's challenge here relies on Gertz for the claimed

component function and component code features. Pet. 26, 30-31; Pet. Reply 11-13. Stewart and Morrow are relied upon for additional features of the claims. Because Petitioner's challenge fails with respect to the component function and component code features of the claims, we do not need to address issues regarding Stewart and Morrow. Therefore, the discussion below focuses on Gertz.

1. *“component function”*

The contentions presented on this claim feature are similar to those in IPR2013-00062. Petitioner relies on Gertz's “actions” to meet this claim limitation. Pet. 26; Transcript 17:21-24. Patent Owner contends that Gertz's “actions” are not component functions. PO Resp. 19, 27 (citing Stewart's Declaration, Ex. 2013 ¶ 40).

For the reasons set forth in the '062 Decision, we agree with Patent Owner and determine that Petitioner has not persuasively explained why information regarding the arrangement of control tasks defines an “action carried out by a program or routine,” as required by a component function. '062 Decision 23. Thus, Petitioner has not established, by a preponderance of the evidence, that Gertz teaches the claimed component functions.

2. *“component code”*

The contentions presented on this claim feature are similar to those in IPR2013-00062. Petitioner relies on Gertz as disclosing this feature. Pet. 30-31. Again, Petitioner does not point to any specific element or feature disclosed in Gertz as teaching the claimed component code and, instead, explains that “ordinary artisans would recognize . . . that the configuration

files that [Gertz] creates comprise software code that binds various components together into a programming sequence (including Turing equivalents) that have been the basis of computer programming for over a century.” Pet. Reply 11. Patent Owner responds that Gertz’s configuration files do not connect the control tasks and configurations to actions using code. PO Resp. 29-30 (citing Stewart’s Declaration, Ex. 2013 ¶ 44).

For the reasons set forth in the ’062 Decision, we agree with Patent Owner and determine that Petitioner has not persuasively explained why the configuration information in Gertz includes an “action statement in a computer language.” ’062 Decision 24-25. Thus, Petitioner has not established, by a preponderance of the evidence, that Gertz teaches or suggests the claimed component code.

E. Motion to Exclude

Patent Owner seeks to exclude certain “new” arguments made in Petitioner’s Reply (Paper 45 at 2) and portions of Petitioner’s expert testimony (*Id.* at 9). For example, Patent Owner alleges that the arguments related to Gertz teaching the claimed core driver function as a result of the cycle function in the method of a port-based object raises a new argument (*id.* at 2), and that testimony of Petitioner’s expert, Dr. Papanikolopoulos, advances a new position on driver functions (*id.* at 12-13). Because we have not relied upon these arguments, they do not affect our decision. The issues raised in Patent Owner’s Motion to Exclude are moot, and the Motion is, therefore, *dismissed*.

Although we ultimately do not rely on these arguments for our decision, we note that a motion to exclude evidence normally is not the

proper vehicle for resolution of a dispute regarding reply arguments and evidence exceeding the proper scope of a reply. A motion to exclude “must identify the objections in the record.” 37 C.F.R. §42.64(c). In the Motion, Patent Owner does not identify where in the record an objection originally was made. If an issue arises regarding whether a reply argument or evidence in support of a reply exceeds the scope of a proper reply, the parties should contact the Board to discuss the issue.

F. Motion to Submit Supplemental Information

Patent Owner sought to file supplemental information (the McClung deposition) that, in Patent Owner’s view, provides independent corroboration of conception. Paper 63. An identical motion was filed in IPR2013-00062 (Paper78). As Petitioner points out in opposing the motion, the proffered materials do not corroborate diligence and, therefore, do not overcome the defect in the proof on that issue. Paper 69, 5. For the reasons discussed in the ’062 Decision, the motion is moot and is therefore *dismissed*. ’062 Decision 12-13.

III. CONCLUSION

We conclude that Petitioner has failed to meet its burden of proof, by a preponderance of the evidence, that claims 1-5 of the ’058 patent are unpatentable under 35 U.S.C. § 103 as obvious over Gertz, Stewart, and Morrow. This is a final written decision of the Board under 35 U.S.C. § 318(a). Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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IV. ORDER

In consideration of the foregoing, it is

ORDERED that Petitioner has failed to prove by a preponderance of the evidence that claims 1-5 of U.S. Patent No. 6,513,058 B2 are unpatentable; and

FURTHER ORDERED that Patent Owner's Motion to Exclude and Motion to Submit Supplemental Information are *dismissed*.

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