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EXAMINER
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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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CISCO SYSTEMS, INC.  
Third Party Requester, Appellant and Cross-Respondent

v.

CIRREX SYSTEMS, LLC  
Patent Owner, Cross-Appellant and Respondent

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Appeal 2012-006121  
*Inter partes* Reexamination Control 95/001,175  
United States Patent 6,415,082 B1  
Technology Center 3900

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Before KEVIN F. TURNER, JONI Y. CHANG, and  
THOMAS L. GIANNETTI, *Administrative Patent Judges*.

TURNER, *Administrative Patent Judge*.

DECISION ON REMAND

Appeal 2012-006121  
Reexamination Control 95/001,175  
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This case is on remand from the United States Court of Appeals for the Federal Circuit (“Federal Circuit”). *Cisco Systems, Inc. v. Cirrex Systems, LLC*, 856 F.3d 997 (Fed. Cir. 2017).

#### STATEMENT OF THE CASE

This proceeding arose from a request by Requester for an *inter partes* reexamination of U.S. Patent 6,415,082 B1 (“the ’082 Patent”), issued to Michael L. Wach on July 2, 2002, based on United States Application 09/526,091, filed March 15, 2000, that asserted priority to U. S. Provisional Application No. 60/124,424, filed March 15, 1999.

With respect to the claims of the ’082 Patent, claims 1–124 were subject to reexamination, with claims 1–34 having been issued with the Patent and claims 35–124 added through amendments filed by Patent Owner. RAN<sup>1</sup> 2–3. Original claims 21–25 were amended and original claim 32 was cancelled (*id.*). Of the added claims, claims 42, 77, 79, 88, and 123 have been cancelled and claims 56, 57, 76, 102, and 103 were found to be patentable by the Examiner (*id.*). The Examiner chose to adopt some of the rejections proffered by Requester, with claims 1–31, 33–41, 43–55, 58–75, 78, 80–87, 89–101, 104–122, and 124 previously rejected. We affirmed the Examiner’s decision to adopt the specific rejections, as well as the Examiner’s decision to not adopt proffered rejections of claims 56, 57, 76, 102, and 103. Dec. on App.<sup>2</sup> 42. Requestor requested rehearing of our

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<sup>1</sup> Right of Appeal Notice, mailed September 9, 2011.

<sup>2</sup> Decision on Appeal, mailed September 5, 2013.

decision, which was denied on July 15, 2015. Both Requester and Patent Owner appealed our decision to the Federal Circuit.

The Federal Circuit determined that all claims on appeal were unpatentable for lack of proper written description support, affirming the rejections of 38–41, 43–47, 49, 50, 58–61, 75, 84–87, 89–93, 95, 96, 104–107, and 121, and reversing the patentability findings with respect to claims 56, 57, 76, 102, and 103. *Cisco Systems, Inc.*, 856 F.3d at 1011. On appeal, the parties agreed to separate the claims into three groups as follows, with a representative claim for each group reproduced below:

Groups	Claims
“equalization claims”	<b>56</b> , 76, and 102
“discrete attenuation claims”	<b>57</b> and 103
“diverting element claims”	<b>38–41</b> , 43–47, 49, 50, 58–61, 75, 84–87, 89–93, 95, 96, 104–107, and 121

*Id.* at 1004–1005. The Federal Circuit did not reach the grounds of unpatentability over 35 U.S.C. § 112, second paragraph, or 35 U.S.C. §§ 102(b), 103(a). *Id.* at 1011.

The ’082 Patent relates to the manipulation of light through filtering in a planar lightguide circuit (“PLC”). Spec. 1:14–17; Abs. Claim 1 reads as follows:

1. A cross-connect waveguide system comprising:
  - a [PLC] having one or more optical paths;
  - a plurality of optical waveguides coupled to said [PLC];
  - a plurality of filtering devices for feeding light energy into said optical paths of said [PLC] or receiving light energy from said optical paths of said [PLC]; and

a diverting element for feeding first light energy at a predetermined wavelength having first information content away from said [PLC], and for feeding second light energy at said predetermined wavelength having second information content into said [PLC], wherein said diverting element is remotely configurable and is controlled with optically encoded information.

38. The cross-connect waveguide system of claim 1, wherein the [PLC] comprises:

a first side that is operative to receive light that has been filtered by a first filtering device of the plurality of filtering devices; and

a second side that is operative to emit light for filtering by a second filtering device of the plurality of filtering devices, and

wherein the diverting element controls light energy flowing on a section of one of the optical waveguides that extends from the first side to the second side.

56. The cross-connect waveguide system of claim 1, wherein the [PLC] comprises a plurality of optical paths and the [PLC] is operative to equalize the intensities of light energy traveling in the plurality of optical paths of the [PLC].

57. The cross-connect waveguide system of claim 1, wherein the [PLC] further comprises a gain flattening element to discretely attenuate light energy traveling in the [PLC].

## ANALYSIS

With respect to the “diverting element claims,” i.e., claims 38–41, 43–47, 49, 50, 58–61, 75, 84–87, 89–93, 95, 96, 104–107, and 121, the Federal Circuit affirmed their rejection as lacking proper written description support

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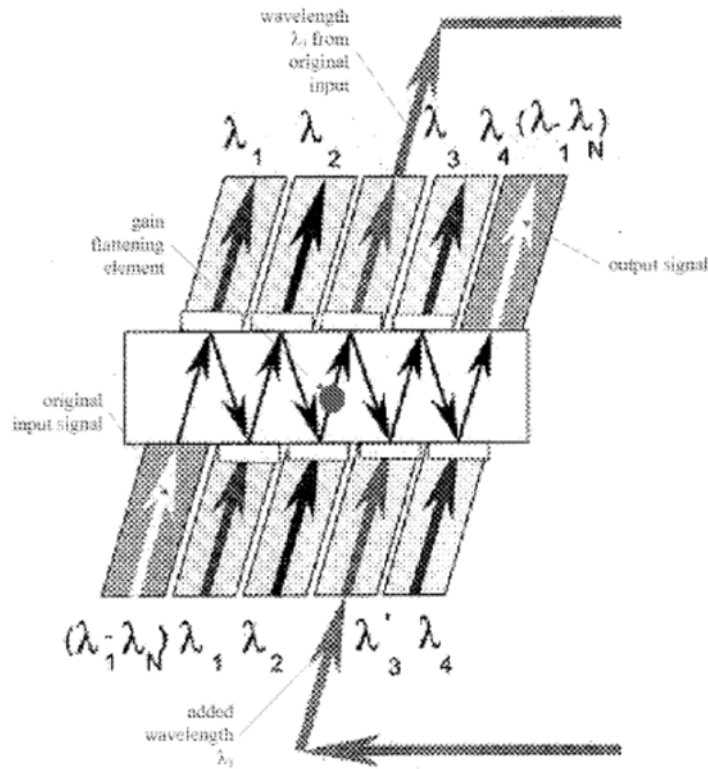
under 35 U.S.C. § 112, first paragraph, noting that substantial evidence supported this finding. *See Cisco Systems, Inc.*, 856 F.3d at 1010–11. As such, we incorporate by reference our prior analysis of this adopted ground of rejection (Dec. on App. 25–28) and affirm the rejection of those claims.

The Federal Circuit corrected several constructions of specific claim terms that it indicated needed further clarification:

[W]e correct the Board’s construction of equalization to clarify that the individual wavelengths of light energy inside the PLC must be equalized with respect to other wavelengths of light energy while those wavelengths are traveling inside the PLC. We also correct the Board’s construction of discrete attenuation to clarify that discrete attenuation does not encompass using the same attenuation element inside the PLC to attenuate all wavelengths of light in the same way.

*Cisco Systems, Inc.*, 856 F.3d at 1007. The Federal Circuit also pointed out that none of claims 56, 57, 76, 102, and 103 issued with the original patent, such that they were not part of the patent’s original disclosure and cannot be intrinsically relied upon as having written description support. *Id.* (citing *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1479 (Fed. Cir. 1998)).

With respect to the “equalization claims” and the “discrete attenuation claims,” Patent Owner argued that those claims had proper written description support by proffering a modified version of Figure 10, reproduced below:



Patent Owner's Respondent Brief<sup>3</sup> 5. Patent Owner also provided:

One simple example is illustrated below, using the PLC of Figure 10 of the '082 patent to illustrate. In this example, a gain flattening element has been added to the "zig-zag" path of the PLC. Even if this element is not wavelength-selective, the gain flattening element would affect the signal strength of wavelengths  $\lambda_1$ ,  $\lambda_2$ ,  $\lambda_3$ , and  $\lambda_4$  of the original input, but not the signal strength of added wavelength  $\lambda_3'$ . For example, the gain flattening element may increase (or decrease) the signal strengths of wavelengths  $\lambda_1$ ,  $\lambda_2$ , and  $\lambda_4$  (that is, a discrete spectral region which contains one or more channels) to equal the signal strength of added wavelength  $\lambda_3'$ , thus equalizing the signal strength of each of the four wavelengths of light in the output signal ( $\lambda_3$  has been dropped from the output signal).

*Id.*

<sup>3</sup> Filed January 6, 2012.

The Federal Circuit determined that “[u]nder the correct claim construction, as explained earlier, the claimed functionality of equalization and discrete attenuation must occur *inside* the PLC with respect to the wavelengths ‘traveling in the [PLC],’ not to wavelengths *outside* of the PLC.” *Cisco Systems, Inc.*, 856 F.3d at 1009 (emphases added). The Federal Circuit found further that equalization of wavelengths inside the PLC with a wavelength outside the PLC, as well attenuation of those same inside wavelengths, when compared to the outside wavelength, is not encompassed by the correct construction. *Id.*

We agree that under such a construction, there is no proper written description for the subject matter of the equalization and discrete attenuation claims. Figure 10, cited by Patent Owner, does not act on wavelengths *within* the PLC to accomplish equalization or discrete attenuation compared with other wavelengths, also within the PLC. The fact that equalization or discrete attenuation can occur in the overall system, utilizing added or dropped wavelengths, for example, does not mean that such functionalities occur within the PLC, as required by claims 56, 57, 76, 102, and 103.

As the Federal Circuit points out, “demultiplexing light to manipulate separately the intensities of individual wavelengths of light while the light is still inside the PLC is a technically difficult solution that the ’082 specification does not solve, let alone contemplate or suggest as a goal or desired result.” *Id.* at 1009–10. We agree that nothing in the original disclosure of the ’082 Patent discloses or explains how individual wavelengths of light are separately manipulated while those wavelengths are still inside the PLC, or that the inventor contemplated any such approach.



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As such, the equalization and discrete attenuation claims lack proper written description support.

For at least foregoing reasons and consistent with the directive of the Federal Circuit, we conclude that claims 56, 57, 76, 102, and 103 are unpatentable as lacking proper written description support under 35 U.S.C. § 112, first paragraph.

### CONCLUSION

With respect to the Examiner's decision to adopt rejections of claims 1, 4, 24, 26, 27, 38–41, 43–47, 49, 50, 53, 58–60, 66, 75, 82–87, 89–93, 95, 96, 99, 104–107, 112, 121, and 122, that decision is affirmed. As indicated previously (Dec. on App. 42), the rejections of claims 2, 3, 5–23, 25, 28–31, 33–37, 48, 51, 52, 54, 55, 61–65, 67–74, 78, 80, 81, 94, 97, 98, 100, 101, 108–111, 113–120, and 124 were affirmed summarily and continue to be affirmed.

With respect to the Examiner's decision not to adopt proffered rejections of claims 56, 57, 76, 102, and 103, that decision is reversed. The rejection of claims 56, 57, 76, 102, and 103 as lacking proper written description support under 35 U.S.C. § 112, first paragraph, is entered as a new ground of rejection.

Pursuant to 37 C.F.R. § 41.77(a), the above-noted rejection constitutes a new ground of rejection. Section 41.77(b) provides that “[a] new ground of rejection . . . shall not be considered final for judicial review.” That section also provides that Patent Owner, **WITHIN ONE MONTH FROM THE DATE OF THE DECISION**, must exercise one of the following two

options with respect to the new grounds of rejection to avoid termination of the appeal proceeding as to the rejected claims:

(1) *Reopen prosecution.* The owner may file a response requesting reopening of prosecution before the examiner. Such a response must be either an amendment of the claims so rejected or new evidence relating to the claims so rejected, or both.

(2) *Request rehearing.* The owner may request that the proceeding be reheard under § 41.79 by the Board upon the same record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

In accordance with 37 C.F.R. § 41.79(a)(1), the “[p]arties to the appeal may file a request for rehearing of the decision within one month of the date of: . . . [t]he original decision of the Board under § 41.77(a).” A request for rehearing must be in compliance with 37 C.F.R. § 41.79(b). Comments in opposition to the request and additional requests for rehearing must be in accordance with 37 C.F.R. § 41.79(c)–(d), respectively. Under 37 C.F.R. § 41.79(e), the times for requesting rehearing under paragraph (a) of this section, for requesting further rehearing under paragraph (c) of this section, and for submitting comments under paragraph (b) of this section may not be extended.

An appeal to the United States Court of Appeals for the Federal Circuit under 35 U.S.C. §§ 141–144 and 315 and 37 C.F.R. § 1.983 for an *inter partes* reexamination proceeding “commenced” on or after November 2, 2002, may not be taken “until all parties’ rights to request rehearing have

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been exhausted, at which time the decision of the Board is final and appealable by any party to the appeal to the Board.” 37 C.F.R. § 41.81; *see also* MPEP § 2682 (8th ed., Rev. 8, July 2010).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). Requests for extensions of time in this *inter partes* reexamination proceeding are governed by 37 C.F.R. § 1.956. *See* 37 C.F.R. § 41.79.

In the event neither party files a request for rehearing within the time provided in 37 C.F.R. § 41.79, and this decision becomes final and appealable under 37 C.F.R. § 41.81, a party seeking judicial review must timely serve notice on the Director of the United States Patent and Trademark Office. *See* 37 C.F.R. §§ 90.1 and 1.983.

AFFIRMED  
37 C.F.R. § 41.77

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