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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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*Ex parte* MARVIN R. YOUNG

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Appeal 2010-006763  
Application 12/055,002  
Technology Center 2800

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Before DENISE M. POTHIER, BARBARA A. BENOIT,  
and DAVID C. MCKONE, *Administrative Patent Judges*.

POTHIER, *Administrative Patent Judge*.

DECISION ON APPEAL  
STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-17, 41, 42, and 51-58. Claims 18-40 and 43-50 have been canceled. App. Br. 2.<sup>1</sup> We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

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<sup>1</sup> Throughout this opinion, we refer to the Appeal Brief (App. Br.) filed July 8, 2009; (2) the Examiner's Answer (Ans.) mailed October 30, 2009; and (3) the Reply Brief (Reply Br.) filed December 22, 2009.

*Invention*

Appellant's invention relates to a cleaning tool for optical connectors. *See generally* Spec. ¶ 0002. Claim 1 is reproduced below with the key disputed limitations emphasized:

1. An optical connector cleaning tool comprising:  
a hollow guide including a first end and a second end opposite the first end; and  
*a mating connector attached to the first end of the hollow guide, wherein the mating connector is configured to connect to an optical connector, and  
wherein the hollow guide is configured to receive a cleaning implement at the second end and to guide the cleaning implement to the optical connector at the first end.*

The Examiner relies on the following as evidence of unpatentability:

Shimoji	US 6,047,716	Apr. 11, 2000
Liu	US 6,769,150 B1	Aug. 3, 2004 (filed Nov. 7, 2001)

*The Rejections*

Claims 1-3, 6-9, 13, 16, 17, 41, 42, 51-53, and 56-58 are rejected under 35 U.S.C. § 102(b) as anticipated by Shimoji. Ans. 3.

Claims 4, 5, 10, 11, and 15 are rejected under 35 U.S.C. § 103(a) as unpatentable over Shimoji. Ans. 3-4.

Claims 12, 14, 54, and 55 are rejected under 35 U.S.C. § 103(a) as unpatentable over Shimoji and Liu. Ans. 4.

### THE ANTICIPATION REJECTION

Regarding illustrative claim 1, the Examiner finds that that Shimoji discloses all the recited elements, including two alternative hollow guides as elements 11 or 32 shown in Figure 4.

Concerning the first proffered hollow guide 11, Appellant argues that (1) element 11 is not configured to guide the cleaning implement to the optical connector at the first end while the mating connector is attached to the first end of element 11 and (2) element 11 is not configured to receive a cleaning implement at the second end. App. Br. 7; Reply Br. 6. In contrast with claim 1, Appellant contends that the hollow guide receives the cleaning implement and the mating connector on the same end or left side. App. Br. 7-8; Reply Br. 2-3.

Regarding the second proposed hollow guide 32, Appellant asserts Shimoji fails to disclose: (1) a mating connector as recited and (2) a hollow guide configured to receive a cleaning implement at the second end and guide the cleaning implement to the optical connector at the first end. App. Br. 9.

### ISSUES

Under § 102, has the Examiner erred in rejecting claim 1 by finding that Shimoji discloses:

(1) the mating connector is attached to the hollow guide's first end and the hollow guide is configured to receive a cleaning implement at the second end; and

(2) the hollow guide is configured to guide the cleaning implement to the optical connector at the first end?

## ANALYSIS

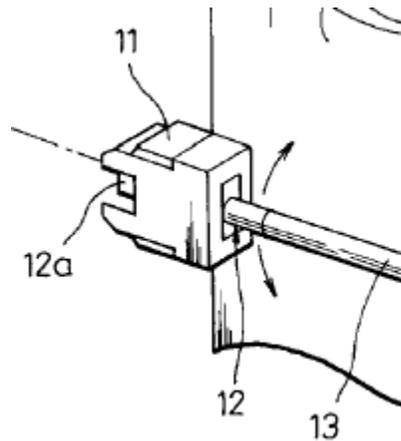
### *1. Hollow Guide Mapped to Element 11*

Based on the record before us, we find no error in the Examiner's rejection of claim 1, which recites in pertinent part that a mating connector is attached to the hollow guide's first end and the hollow guide is configured to receive a cleaning implement at the second end. At the outset, we admit the Examiner's position is somewhat confusing. In the rejection and the discussed-second alternative hollow guide (i.e., element 11), the Examiner maps the hollow guide to cleaning housing 11, the mating connector to housing 32, and the cleaning implement to cleaning member 12. Ans. 3. In the Response to Argument section, the Examiner maintains that the hollow guide is element 11, but maps the mating connector to backplane 30, and cleaning implement to driving shaft 13. Ans. 5-6. To maintain consistency, we will focus on the Examiner's position in the rejection – not in the Response to Argument section – and will not address Appellant's arguments (*see* Reply Br. 2-4) concerning the Examiner's differing position in the Response.

Appellant argues that element 12 (e.g., a cleaning implement) enters the cleaning housing 11 (e.g., a hollow guide) from the left side and the same side as the housing 32 (e.g., a mating connector). App. Br. 7; Reply Br. 2-3. Based on this reasoning, Appellant asserts the hollow guide is not configured to receive a cleaning implement at the second end as recited. *See* Reply Br. 7-8. We disagree. First, Shimoji has a right arrow in Figure 1A above cleaning member 12. Yet, as described, this arrow indicates an axial direction of the shaft member (*see* col. 2, l. 30; col. 4, ll. 19-20) and does not describe that the cleaning member 12 is inserted from the left or the

housing's first end. Second, even assuming that the member 12 is inserted at the left side, this does not prevent the cleaning implement (e.g., 12) from also being *received* at the hollow guide's (e.g., 11) second end.

To illustrate, a portion of Shimoji's Figure 4 is shown below providing a perspective view of the cleaning tool for an optical connector in a "using state":



Part of Figure 4 with Cleaning Housing 11 and  
Cleaning Member 12 Shown in Use

Col. 3, ll. 31-32; Fig. 4. Here, the cleaning section 12a of the cleaning member 12 is positioned on one end of the housing or hollow guide 11 (e.g., the left side of housing 11) and a connecting section 12b of the cleaning member 12, connected to driving shaft 13, is positioned on a second side or end of the hollow guide 11 (e.g., the right side of housing 11). *See* col. 4, ll. 1-7; Figs. 1A, 4. Thus, a part of Shimoji's cleaning implement 12 (e.g., connecting section 12b or the portion of 12 shown on the right side of housing 11) is contained within a second end of the hollow guide (i.e., housing 11).

Moreover, giving the term, "receive," its broadest reasonable construction, Shimoji discloses the hollow guide is configured to receive a

cleaning implement at the second end. That is, the word, “receive,” includes “to act as a receptacle or container for.”<sup>2</sup> Given this understanding, Figure 4 in Shimoji demonstrates that the hollow guide (e.g., housing 11) is configured to receive a cleaning implement (e.g., the portion of cleaning member 12 shown on the right side of the housing 11) at its second end. Appellant also admits that the “cleaning member 12 is . . . secured into place within cleaning housing 11 . . .” App. Br. 8. Shimoji further shows in Figure 4 and describes that a mating connector (e.g., housing 32) is attached to the first end of the hollow guide 11 (e.g., the end near the left side of housing 11). *See* Ans. 3 (citing col. 4, ll. 66-67; Fig. 4).

Lastly, Appellant contends that the hollow guide (e.g., 11) is not configured to guide the cleaning implement to the optical connector at the first end because the cleaning member 12 is attached to the driving shaft 13 and is already secured into place within the cleaning housing 11 such that it cannot guide cleaning member 12 from one end to the other end. *See* App. Br. 8. We disagree. Notably, claim 1 does not recite that the hollow guide is configured to guide the cleaning implement “from one end to the other” end as argued. *See id.* Also, Shimoji discloses that the cleaning housing (e.g., 11) acts as a guide to clean the end surface of the optical connector’s ferrule 31a inserted in the other housing (e.g., 32). Col. 3, ll. 1-4; col. 4, l. 66 – col. 5, l. 4; Fig. 4. Shimoji further notes that the cleaning section 12a at the forward end (e.g., the first end) contacts the optical connector plug 31 and the cleaning section 12 slides on the connection end surface of ferrule 31a so as to clean it using oscillation. *See* col. 4, ll. 15-20; Fig. 4. Shimoji

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<sup>2</sup> Merriam-Webster’s Online Dictionary, “receive” (definition 2a), *available at* <http://www.merriam-webster.com/dictionary/receive>.

therefore teaches, as broadly as recited, that the hollow guide is configured to guide the cleaning implement to the optical connector at the first end.

For the foregoing reasons, Appellant has not persuaded us of error in the rejection of independent claim 1 and claims 2, 3, 6-9, 13, 16, 17, 41, 42, 51-53, and 56-58 not separately argued with particularity<sup>3</sup> (App. Br. 10-11).

## 2. *Hollow Guide Mapped to Element 32*

Based on the record before us, we also find no error in the Examiner's alternative rejection of claim 1 that maps the recited hollow guide to element 32 in Shimoji. Appellant argues that the Examiner has failed to point to any structure in Shimoji that discloses a mating connector as recited and that the cited portions do not depict a mating connector attached to a first end of the hollow guide and configured to connect to an optical connector. App. Br. 9-10. We agree that the Examiner has not labeled with a reference number an element in Shimoji corresponding to the mating connector. *See* Ans. 3. However, the Examiner has cited to column 4, line 57, through column 5, line 5, and Figure 4 in Shimoji. *See id.* This section of Shimoji discusses and shows that optical connector plug 31 is inserted into the housing 32 or attaches plug 31 to the hollow housing or guide 32 at the left or first end. Col. 4, ll. 61-63; col. 4, l. 66 – col. 5, l. 1; Fig. 4.

Additionally, cited Figure 4 shows the plug 31 consists of multiple components. *See* Ans. 3 (citing Fig. 4). Plug 31 includes an intermediate rectangular element which mates with the rectangular component of housing 32 (e.g., a mating connector attached to a first end of a hollow guide), and

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<sup>3</sup> Appellant separately discusses claim 51 but states that this claim is patentable for the reasons discussed with regard to claim 1. App. Br. 10-11.

this intermediate portion also connects to an optical connector (e.g., ferrule 31a and ribbon fiber 31b). *See* col. 4, ll. 57-61; Fig. 4.

Appellant asserts that, while cleaning housing 11 engages to fit into housing or hollow guide 32, the guide is not configured to guide the cleaning implement to the optical connector at the first end or to guide the cleaning element 12 in any way. App. Br. 10. We disagree. Shimoji teaches that the cleaning housing 11 fits into the housing 32 and the optical plug 31 is inserted into the housing 32. Col. 4, l. 66 – col. 5, l. 1; Fig. 4. Shimoji further discusses that “[a]s a result [of this arrangement], the cleaning section 12a at the forward end of the cleaning member 12 stored in the cleaning housing 11 contacts with the multifiber optical connector plug 31 with the connection end surface of the ferrule 31a being pressed.” Col. 5, ll. 2-5. Thus, Shimoji discloses that the arrangement of how element 11 fits into housing 32 permits or “guides” the cleaning implement to contact the optical connector at the first end. *See id.*

For the foregoing reasons, Appellant has not persuaded us of error in the rejection of independent claim 1 and claims 2, 3, 6-9, 13, 16, 17, 41, 42, 51-53, and 56-58 not separately argued with particularity.

#### THE REMAINING REJECTIONS

Appellant does not separately argue the obviousness rejections of claims 4, 5, 10-12, 14, 15, 54, and 55. *See* App. Br. 11. We are not persuaded the Examiner erred in rejecting these claims for the reasons previous discussed and need not address whether the additional reference teaches any alleged missing limitation.

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### CONCLUSION

The Examiner did not err in rejecting claims 1-17, 41, 42, and 51-58 under § 102 or § 103.

### DECISION

The Examiner's decision rejecting claims 1-17, 41, 42, and 51-58 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

babc