

The opinion in support of the decision being entered today is  
*not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* FEDERICK M. DISCENZO, CHUNG-CHIUN LIU,  
and LAURIE A. DUDIK

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Appeal 2007-1380  
Application 10/409,895  
Technology Center 1700

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Decided: July 27, 2007

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Before CHUNG K. PAK, CATHERINE Q. TIMM, and LINDA M.  
GAUDETTE, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1 and 3-34. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

## I. BACKGROUND

The invention relates to a filter assembly with a sensing assembly. Claims 1 and 19 are illustrative of the subject matter on appeal:

1. A filter-sensor integration, comprising;

a filter assembly having a housing defining an interior chamber, the filter assembly comprising a filter material enclosing the chamber,

a sensing assembly comprising at least one sensor located on a portion of the sensing assembly, the portion of the assembly is an extension that integrally fits within the chamber of the filter assembly.

19. A fluid analysis system, comprising;

a filter having a housing, the filter comprising filter material that provides for fluid to pass there through, the filter housing defining an interior chamber enclosed by the filter material; and

a sensing assembly comprising an extension that comprises a sensing array having a plurality of sensors that sense various modalities of the fluid, the sensing assembly modularly integrating with the filter such that the extension resides within the interior chamber so that at least a subset of the sensors are exposed to the fluid.

The Examiner relies on the following prior art references to show unpatentability:

|             |                 |               |
|-------------|-----------------|---------------|
| Discenzo    | US 6,023,961    | Feb. 15, 2000 |
| Moscaritolo | US 6,471,853 B1 | Oct. 29, 2002 |

The rejections as presented by the Examiner are as follows:

1. Claims 1 and 3-34 are rejected under 35 U.S.C. § 102(e) as anticipated by Moscaritolo; and
2. Claims 15-17 and 29 are rejected under 35 U.S.C. § 103(a) as unpatentable over Moscaritolo in view of Discenzo.

In reviewing the rejections, we consider the dispositive issues arising from the contentions in the Brief filed August 28, 2006, the Answer filed October 4, 2006, and the Reply Brief filed December 4, 2006.

## II. DISCUSSION

### A. Issue

The dispositive issue arising from the contentions of Appellants and the Examiner is: Does Moscaritolo describe a sensing assembly with a sensor on an “extension that integrally fits within the chamber of the filter assembly” as required by claim 1 and a sensing assembly “modularly integrating with the filter such that the extension resides within the interior chamber” as required by claim 19?

This issue requires us to determine the scope of the claim language at issue. During examination, “claims . . . are to be given their broadest reasonable interpretation consistent with the specification, and . . . claim language should be read 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, 70 USPQ2d 1827, 1830 (Fed. Cir. 2004). Absent claim language carrying a narrow meaning, we only limit the claim based on the specification when it expressly disclaim the broader definition. *In re Bigio*, 381 F.3d 1320, 1324-25, 72 USPQ2d 1209, 1210-11 (Fed. Cir. 2004).

Turning first to the Specification, we find no particular definition or express disclaimer with regard to the language at issue. While Appellants argue that “[i]t is clear from [Appellants’] Fig. 2 and Fig. 7 that the extension of the sensing assembly is integrated into the filter such that it is proportioned to the shape and size of the filter chamber,” the claims are not so limited. (Reply Br. 5). The claims do not require that the extension be proportioned to the shape and size of the filter chamber, the claims are open to an extension of any shape and size. The word “extension” merely requires some extension. The words “integally fits” can reasonably be read as merely requiring that the extension be a part of the chamber, as one definition of “integral” which is consistent with the use of the word in the Specification is “of, pertaining to, or belonging as a part of the whole; constituent or component: *integral parts*.” See dictionary.com. The words “modularly integrating” can be reasonably read as merely requiring the sensing assembly integrate with the filter as a module, i.e., a component part.

The next question is: Does Moscaritolo describe what is claimed such that it anticipates under 35 U.S.C. § 102?

We determine that the language of the claims encompasses what is described by Moscaritolo. The sensor package 101 as illustrated in Figure 2 of Moscaritolo has a portion that is an “extension that integrally fits within

the chamber of the filter assembly” when the sensor component 5 is inserted into a sensor port within end cap 9 as described in Moscaritolo. The sensor package 101 is embedded in the seal 102 at one end of a sensor component 5 so that the front face 103 will be exposed to fluid flow. Figure 2 illustrates the sensor package 101 as extending out from the seal 102 of the sensor component 5.

Below is the reproduction of the right hand portion of Figure 2:

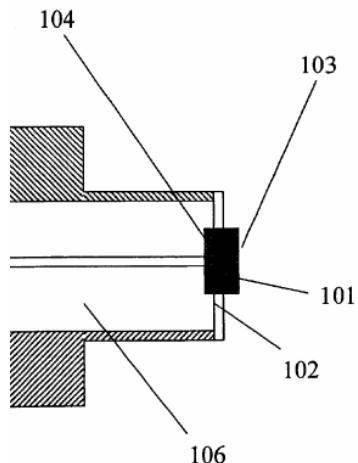


Figure 2 shows that the sensor components 5 are mounted in sensor ports 4 within the filter module. While Figure 1B only depicts the sensor ports 4 and sensor components 5 in the filter manifold, the end cap 9 may have sensor ports as well (Fig. 1B; col. 2, ll. 28-43; col. 2, l. 63-col. 3, l. 3). Figure 1B illustrates the mounting of the sensor component 5 so that the sensor package 101 extension protrudes beyond the wall of the fluid cavity, the seal 102 being flush with the wall of the cavity as follows:

The upper-right hand side of Figure 1B is reproduced below:

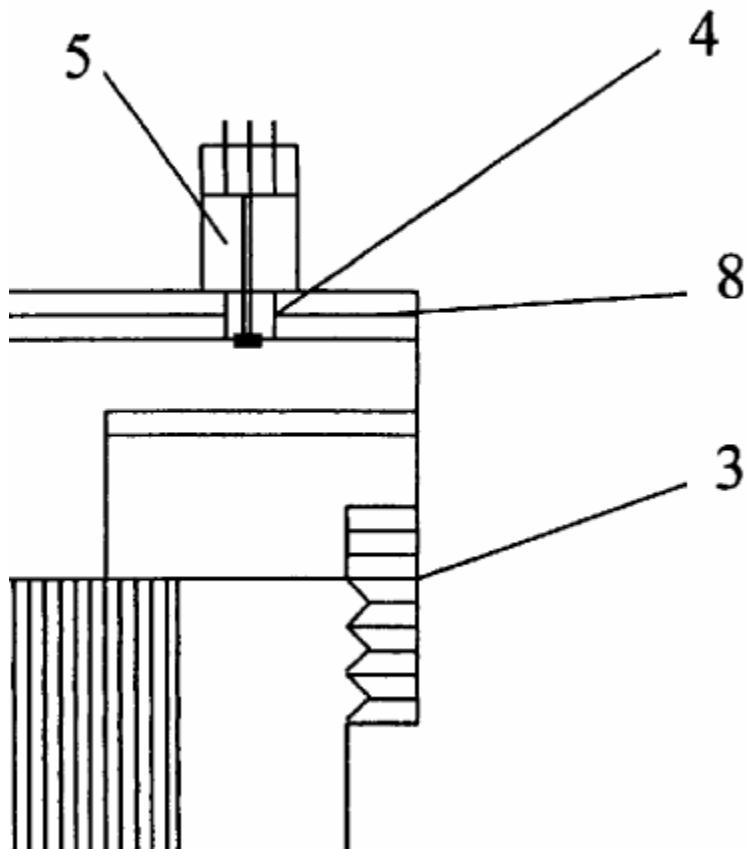


Figure 1B shows how the sensor component fits within port 4. Figure 1B shows the extension of the sensor package 101 into the cavity.

Moscaritolo's description further anticipates claim 19 for analogous reasons. The sensing assembly of Moscaritolo (sensor component 5) is modular in the sense that it can be removed from the sensor port as a module (component part), and it integrates with the filter such that the extension resides within the interior chamber. The sensor package 101 extends into the cavity when mounted so that the seal 102 is flush with the cavity wall.

“The law of anticipation does not require that the reference ‘teach’ what the subject patent teaches. Assuming that a reference is properly ‘prior art,’ it is only necessary that the claims under attack, as construed by the court, ‘read on’ something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or ‘fully met’ by it.” *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983). In this case, the claim language is broad enough under a reasonable interpretation consistent with the Specification to encompass what is taught by Moscaritolo.

Appellants argue that Moscaritolo teaches positioning the front face of the sensor component flush, not as an extension, pointing to the following disclosure:

It is *preferable* that the sensor components do not impede or disturb flow of the medium through the filter module.

Accordingly it is *desirable* that the sensor components 5 be placed in the sensor ports 4 so that the front face 103 of the MEMS sensor package 101 is flush with the interior surface of the housing 8 or other part that the sensor port 4 penetrates.

(Br. 4 quoting Moscaritolo, col. 4, ll. 44-50 (emphasis added)). We note that the disclosure merely reflects a preference. It remains that there is a disclosure of embedding the sensor package 101 in seal 102 such that, as illustrated in Figure 2, it extends beyond the seal. There is also a disclosure of further inserting the sensor component 5 into the sensor port so that the seal 102 is flush and the sensor package 101 extends into the interior surface that the sensor port penetrates.

### III. CONCLUSION

We determine that Moscaritolo describes a sensing assembly with a sensor on an “extension that integrally fits within the chamber of the filter assembly” as required by claim 1 and a sensing assembly “modularly integrating with the filter such that the extension resides within the interior chamber” as required by claim 19.

Appellants do not advance any additional arguments pointing out any error in the rejection of claims 15-17 and 29 under 35 U.S.C. § 103(a). Therefore, the above discussion also applies to this rejection.

### IV. DECISION

With regard to the decision of the Examiner rejecting claims 1 and 3-34 under 35 U.S.C. § 102(e) and claims 15-17 and 29 under 35 U.S.C. § 103(a), we affirm.

### V. TIME PERIOD FOR RESPONSE

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

AFFIRMED

sld/ls

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