

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RICHARD A. HAIGHT,
PETER P. LONGO, and
ALFRED WAGNER

Appeal 2008-2652
Application 10/041,328
Technology Center 3700

Decided: May 22, 2008

Before EDWARD C. KIMLIN, CHUNG K. PAK, and LINDA M. GAUDETTE, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 15, 17-19, 21, 22, 24, and 26-32. Claims 1-14 have been withdrawn from consideration.

Claim 15 is illustrative:

15. An apparatus for ablating a region of a sample with a laser beam, the apparatus comprising:

a source providing a pulsed laser beam of a certain energy, the source focusing the pulsed laser beam into a spot on the sample to ablate a region of the sample, said source including an immersion object lens;

a liquid; and

a source providing said liquid over the spot being ablated simultaneously with ablation to remove the ablation products, said lens being disposed in said liquid, wherein the index of refraction of said liquid substantially matches that of the final element of said objective lens.

The Examiner relies upon the following references in the rejection of the appealed claims:

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|---------|-----------|---------------|
| Kojima | 3,991,296 | Nov. 9, 1976 |
| Liedtke | 4,027,137 | May 31, 1977 |
| Taboada | 5,112,328 | May 12, 1992 |
| Mourou | 5,656,186 | Aug. 12, 1997 |

Appellants' claimed invention is directed to an apparatus for ablating a region of a sample with a laser beam. The apparatus comprises a source providing a pulsed laser beam that is focused on a spot on the sample and an immersion object lens that is disposed in a liquid that is also over the spot being ablated for removing the ablation products. The index of refraction of the liquid substantially matches either the final element of the lens or the sample.

Appealed claims 15, 17, 27, and 30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Taboada. Claims 15, 17-19, 21, 22, 24, and

26-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kojima in view of Liedtke, Mourou, and Taboada.¹

Appellants have not set forth an argument that is reasonably specific to the groups of claims separately rejected under § 102 and § 103. Since claim 15 is common to both groups, all the appealed claims stand or fall together with claim 15.

We have thoroughly reviewed each of Appellants' arguments for patentability. However, we find that the Examiner's rejections are free of reversible error. Accordingly, we will sustain the Examiner's rejections.

We consider first the Examiner's rejection under § 102 over Taboada. Appellants do not dispute the Examiner's factual determination that Taboada, like Appellants, discloses an apparatus for ablating a region of a sample comprising a source which provides a pulsed laser beam that focuses into a spot on the sample to be ablated, as well as an immersion object lens and a means for providing a liquid over the ablated spot simultaneously with the ablation to remove the ablation products, wherein the immersion object lens is disposed in the liquid. Also, Appellants have not refuted the Examiner's finding that the apparatus of Taboada is fully capable of using a liquid having an index of refraction that substantially matches the final element of the lens or the sample.

Appellants maintain that "the apparatus of Taboada could be used without meeting the index of refraction limitations of the present claims" (Principal Br. 12, second para.). However, while this is so, the fact that the

¹ The Examiner's statement of the rejection at page of the Answer includes 23 and 25, which have been canceled by Appellants.

apparatus of Taboada can use a liquid having a different index of refraction does not establish the requisite distinction between structures of apparatus within the scope of the appealed claims and the structure fairly described by Taboada. Significantly, Appellants have pointed to no structural distinction between the claimed and reference apparatus.

Appellants also contend that the claim recitation of "a liquid" does not appear in a preamble of the claims but in the body of the claims. However, regardless of where in the claim the recitation of "a liquid" appears, the fact remains that the claim recitation refers to the material operated on by the apparatus rather than the structure of the apparatus itself. It is well settled that a claim recitation regarding the material worked upon by a claimed apparatus does not impose any structural limitations on the claimed apparatus which serve to distinguish it from an apparatus described by the prior art which satisfies the structural limitations of the claims at issue. *In re Rishoi*, 197 F.2d 342, 344 (CCPA 1952); *Ex parte Masham*, 2 USPQ2d 1647 (BPAI 1987). It is noteworthy that the presently claimed apparatus is not limited to an apparatus or device which permanently contains the liquid therein as in, for example, a carpenter's level.

Concerning the § 103 rejection, Appellants rely upon the same arguments set forth above with respect to the § 102 rejection.

In conclusion, based on the foregoing, the Examiner's decision rejecting the appealed claims is affirmed.

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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)(effective Sept. 13, 2004).

AFFIRMED

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