

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GREGORY M. JURSIK and WILLIAM A. VON DRASEK

Appeal No. 95-2231
Application No. 08/114,285¹

HEARD: June 9, 1998

Before JOHN D. SMITH, WEIFFENBACH and PAK, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

Jursich et al. (appellants) appeal from the examiner's final rejection of claims 16 through 19, 21 through 24, 31 and 32, which are all of the claims pending in the application.

¹ Application for patent filed September 1, 1993. According to the appellants, the application is a continuation of Application 07/665,240, filed March 6, 1991, now abandoned.

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Claims 31 and 32 are illustrative of the subject matter on appeal and read as follows:

31. A method of extending the continuous operating life of an excimer laser containing a lasing gas or gas mixture selected from the group consisting of XeF, KrF and ArF, by removing an amount of CF₄ impurity therefrom during operation of said excimer laser, which is sufficient to minimize loss of laser power output and to extend the continuous operating life of said excimer laser, which comprises:

a) introducing oxygen into said lasing gas or gas mixture, and reacting said oxygen with said CF₄ impurity which accumulates in said lasing gas or gas mixture, said oxygen being introduced in an amount effective to produce one or more compounds which are condensable with refrigeration means; and

b) condensing said one or more or more compounds produced in step a) in cryogenic trap, with refrigeration means and at a temperature sufficient to condense said one or more compounds substantially without condensing said lasing gas or gas mixture therewith, thereby removing said CF₄ impurity from said lasing gas or gas mixture, thereby extending the operating life of the excimer laser.

32. A method of extending the continuous operating life of an excimer laser containing a lasing gas or gas mixture selected from the group consisting of XeF, KrF and ArF, by removing an amount of oxygen impurity therefrom during operation of said excimer laser, which is sufficient to minimize loss of laser power output and to extend the continuous operating life of said excimer laser, which comprises:

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To remedy these deficiencies, the examiner relies on the disclosure of Reid. Id. Reid, however, at least teaches away from deliberate introduction of oxygen or CF₄ impurity into the laser during its operation. Specifically, Reid states that "[t]hose materials which produce harmful impurities when placed in the laser vessel must be avoided." See page 4. It is apparent from this statement that Reid is interested in removing, rather than adding, impurities. On this record, the examiner has supplied no evidence suggesting the desirability of introducing oxygen or CF₄ impurity based on the particular impurities present in a laser system during its operation. Thus, it cannot be said that the examiner has met the burden of establishing a prima facie case of obviousness.

The decision of the examiner rejecting claims 16 through 19, 21 through 24, 31 and 32 is reversed.

REVERSED

JOHN D. SMITH)
Administrative Patent Judge)
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)	BOARD OF PATENT
CAMERON WEIFFENBACH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
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CHUNG K. PAK)	
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Appeal No. 95-2231
Serial No. 08/114,285

Judge PAK

Judge JOHN D. SMITH

Judge WEIFFENBACH

Received: 11 JUN 98

Typed: 13 JUN 98

Revision: 15 JUN 98

DECISION: REVERSED

Send Reference(s): Yes No

Panel Change: Yes No

3-Person Conf. Yes No

Heard: Yes No

Remanded: Yes No

Index Sheet-2901 Rejection(s): _____

Acts 2: _____

Palm: _____

Mailed:

Updated Monthly Disk: _____

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