

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JABEZ McCLELLAND

Appeal No. 95-3942
Application No. 08/008,976¹

ON BRIEF

Before KIMLIN, SCHAFER and OWENS, Administrative Patent Judges.
KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claim 6. Claims 2-5, the other claims remaining in the present application, have been objected to by the examiner as being allowable but dependent upon the rejected claim. Appealed claim 6 reads as follows:

¹ Application for patent filed January 26, 1993.

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for manipulation of the radiation throughout the entire length of the beam, as is the case with metastable rare gas atoms.

Appealed claim 6 stands rejected under 35 U.S.C. § 102(b) as being anticipated by McMillan.

Upon careful consideration of the opposing arguments presented on appeal, we will not sustain the examiner's rejection.

It is fundamental that to constitute anticipation under 35 U.S.C. § 102 all material elements of a claim must be present in one prior art source. In re Marshall, 578 F.2d 301, 304, 198 USPQ 344, 346 (CCPA 1978); In re Kalm, 378 F.2d 959, 962, 154 USPQ 10, 12 (CCPA 1967). In the present case, we concur with appellant that McMillan fails to describe within the meaning of § 102 the claimed step of "directing a beam of metastable rare gas atoms onto a surface of a lithographic resist" (emphasis added). We appreciate that McMillan, at column 5, lines 24-28, discloses that "significant radiation from the collision zone consists of metastable or ground state atoms, free radicals, and electromagnetic radiation (light). In general, this radiation emanates in all directions from the collision zone." However, McMillan discloses that it is ions and vacuum ultraviolet light that is directed onto the resist. McMillan provides no description of directing a beam of metastable rare gas atoms onto

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a lithographic resist, as required by appealed claim 6. While we appreciate that the resist of McMillan may be incidentally exposed to some level of intensity of metastable atoms, as well as ions and vacuum ultraviolet radiation, the examiner has not established with factual evidence that the process of McMillan inherently directs a beam of metastable atoms on the resist.

Based on the foregoing, the examiner's decision rejecting the appealed claims is reversed.

REVERSED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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RICHARD E. SCHAFER)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
TERRY J. OWENS)	
Administrative Patent Judge)	

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Larson and Taylor
727 23rd Street South
Arlington, VA 22202