

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte KENNETH M. SKULINA, RICHARD M. BIONTA,
DANIEL M. MAKOWIECKI and CRAIG S. ALFORD

Appeal No. 1999-1873
Application No. 08/762,572

ON BRIEF

Before ABRAMS, FRANKFORT, and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the refusal of the examiner to allow claims 13, 15 to 19, 21, 22 and 24 to 32, as amended subsequent to the final rejection.¹

We REVERSE and REMAND.

¹ While the examiner has approved entry of the amendment after final rejection (Paper No. 9, filed June 9, 1998), we note that this amendment has not been clerically entered.

BACKGROUND

The appellants' invention relates to a process for fabricating beryllium-based multilayer x-ray mirrors useful in the wavelength region greater than the beryllium K-edge (11.1nm) (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Shinohara	4,380,211	Apr. 19, 1983
Snyder	4,591,418	May 27, 1986
Suzuki et al. (Suzuki)	5,153,898	Oct. 6, 1992
Itou et al. (Itou)	5,272,744	Dec. 21, 1993
Fukuda et al. (Fukuda)	5,310,603	May 10, 1994
Tennant et al. (Tennant)	5,521,031	May 28, 1996
Asakawa et al. (Asakawa)	JP 62-56568	Mar. 12, 1987
Nagata	JP 63-32849	Feb. 12, 1988 ²

Claims 13, 15 to 19, 21, 22 and 24 to 32 stand rejected under 35 U.S.C. § 103 as being unpatentable over either Fukuda, Itou, Suzuki or Tennant in view of Snyder and either Nagata, Asakawa or Shinohara.

² In determining the teachings of Nagata and Asakawa, we will rely on the translations provided by the USPTO. A copy of the translations are attached for the appellants' convenience.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the final rejection (Paper No. 8, mailed April 21, 1998) and the answer (Paper No. 18, mailed January 12, 1999) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 16, filed November 30, 1998) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 13, 15 to 19, 21, 22 and 24 to 32 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is

established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention.

See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

The appellants argue that the applied prior art does not suggest the claimed subject matter. We agree.

All the claims under appeal require discharging beryllium-free air into the environment by providing filtering for preventing contamination of the surrounding environment by the beryllium. However, these limitations are not suggested by the applied prior art. In that regard, while Nagata, Asakawa and Shinohara may have taught or suggested filtering beryllium, they do not teach or suggest discharging particulate-free air (i.e., clean air) into the environment by providing filtering for preventing contamination of the surrounding environment by particulates. In that regard, Shinohara teaches a process chamber 1 which is connected in a closed circuit with dust collector 16 and blower 15. Thus, Shinohara does not suggest **discharging** particulate-free **air into the environment** by providing filtering for preventing contamination of the surrounding environment by particulates. Nagata teaches a vacuum chamber 3 wherein disc 4 is cleaned by injecting N₂ from gas line 2 so that

dust accumulated on the disc is wound up. The dust and N₂ are rapidly vacuumed from a vacuum exhaust line 8 and the dust wound up with the N₂ gas are absorbed by the vacuum pump (translation, p. 6). Thus, Nagata does not suggest **discharging** particulate-free **air into the environment** by providing filtering for preventing contamination of the surrounding environment by particulates. Asakawa teaches a vacuum tank 1 provided with an electrostatic collection device 14 which collects microparticles 13a which microparticles 13a are subsequently exhausted from exhaust outlet 3 to a point outside the vacuum tank 1 as shown schematically in Figure 3 (translation, p. 4). Thus, Asakawa does not suggest **discharging** particulate-free **air into the environment** by providing filtering for preventing contamination of the surrounding environment by particulates.

In our view, the only suggestion for modifying any of the primary references (i.e., Fukuda, Ito, Suzuki and Tennant) in the manner proposed by the examiner to meet the above-noted limitations stems from hindsight knowledge derived from the appellants' own disclosure. The use of such hindsight knowledge to support an obviousness rejection under 35 U.S.C. § 103 is, of course, impermissible. See, for example, W. L. Gore and Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). It follows that

the decision of the examiner to reject claims 13, 15 to 19, 21, 22 and 24 to 32 under 35 U.S.C. § 103 is reversed.

REMAND

We remand this application to the examiner for further consideration of the patentability of the claims under appeal under 35 U.S.C. § 103. Specifically, it is our view that the examiner should determine what are the well established requirements and/or standards for handling and processing of beryllium (referred to on page 16 of the specification). Does the requirements and/or standards for handling and processing of beryllium require that only beryllium-free air be discharged into the environment? It is also our belief that the examiner should consider a search for prior art that teaches that it is known to filter air and particles coming from a coating chamber so that particulate-free air (i.e., clean air) is discharged into the environment thereby preventing contamination of the surrounding environment by particulates.

CONCLUSION

To summarize, the decision of the examiner to reject claims 13, 15 to 19, 21, 22 and 24 to 32 under 35 U.S.C. § 103 is reversed. In addition, this application has been remanded to the examiner for further consideration.

REVERSED and REMANDED

NEAL E. ABRAMS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHARLES E. FRANKFORT)	APPEALS
Administrative Patent Judge)	AND
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JEFFREY V. NASE)	
Administrative Patent Judge)	

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