

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JACK AYERS and KHERSHED P. COOPER

Appeal No. 2000-0892
Application 08/673,762

ON BRIEF

Before GARRIS, DELMENDO, and PAWLIKOWSKI, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's refusal to allow claims 1 through 13 and 31 through 36. Claims 14 through 30 are withdrawn from further consideration as being drawn to non elected claims.

Claim 1 is representative of the subject matter on appeal and is set forth below:

1. A rapidly spinning cup molten metal atomizer capable of continuous operation comprising:

cup means having an inner wall designed to permit rapid spinning of said cup and said inner wall having an upper lip with no upper lid;

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spinning means for rapidly spinning said cup;

a fluid supply means to apply atomizing fluid to the inner wall of said cup means to form a layer or film of the fluid on the inner wall and the fluid flowing up and over the lip due to the centrifugal force;

molten metal supply means to supply a stream of molten metal to the interior of the rapidly spinning cup means when said cup is rapidly spinning;

directing means to direct the stream of molten metal from the molten metal supply means to the layer or film of atomizing fluid on the inner wall of said cup means whereby the atomizing fluid fragments and quenches the molten metal to form a slurry of atomizing fluid and solidified powdered metal on said inner wall and the slurry flows up and over the lid to discharge from the cup; and

recovery means to collect the continuously discharged slurry of atomizing fluid and solidified powdered metal from the cup.

The prior art reference relied upon by the examiner is:

Bourdeau

4,217,082

Aug. 12, 1980

Claims 1 through 13 and 31 through 36 stand rejected under 35 U.S.C. § 103 as being unpatentable over Bourdeau.

We have carefully reviewed the claims, specification, and the applied art, including all of the arguments and evidence

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advanced by both the examiner and appellants in support of their respective positions. This review leads us to conclude that the 35 U.S.C. § 103 rejection is not well founded. Accordingly, we reverse this rejection. Our reasons for this determination are set forth below.

Rather than reiterate the positions set forth by appellants and the examiner, we focus on the relevant aspects, discussed below.

On pages 3 through 4 of the brief, appellants indicate that Bourdeau discloses gas nozzles added outside the cup to assure rapid cooling of the droplets. On page 3 of the answer, the examiner states that Bourdeau teaches a nozzle used for molten metal which is extended down into the spinning cup with a plurality of nozzles for directing cooling fluid into the cup and examiner refers to column 2, lines through 25, lines 35 through 37, lines 42 through 50, and lines 57 through 68 of Bourdeau.

Our review of Bourdeau indicates that nozzle plate means shown in Fig. 1 include a plurality of annular nozzles therein for directing a cooling fluid downwardly around the cup means (90). See Fig. 1 and column 2, lines 42 through 45. We cannot find disclosure indicating that the annular nozzles of nozzle plate means (10) supply atomizing fluid "to the inner wall of said cup means" as set forth in appellants' claim 1. The examiner has not explained how Bourdeau discloses this aspect of appellants' claim 1. Therefore, we agree with appellants' observations of Bourdeau in this regard.

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Furthermore, we note that absent structure capable of performing the functional limitations of the means being claimed, the prior art cannot meet the claims. In re Mott, 557 F.2d 266, 269, 192 USPQ 305, 308 (CCPA 1977). Here, the examiner has not explained how the nozzle plate means (10) having a plurality of annular nozzles are able to apply atomizing fluid to the inner wall of cup means (90) of Bourdeau. Nor has the examiner recognized this difference and

explained why the difference would have been obvious to one of ordinary skill in the art. Therefore, we determine that the examiner has not set forth a prima facie case. Hence, we reverse the rejection of record.

CONCLUSION

The art rejection of record is reversed.

REVERSED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
ROMULO H. DELMENDO)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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BEVERLY A. PAWLIKOWSKI)
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