

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. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WARREN D. GROSSKLAUS JR.,
ROGER D. WUSTMAN, JOHN M. POWERS,
JEFFREY A. CONNER and JON C. SCHAEFFER

Appeal No. 2000-0821
Application 08/886,504

ON BRIEF

Before WARREN, WALTZ and KRATZ *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal and Opinion

We have carefully considered the record in this appeal under 35 U.S.C. § 134, including the opposing views of the examiner, in the answer, and appellants, in the brief and reply brief, and based on our review, find that we cannot sustain the rejection of appealed claims 11 and 13 through 17, 19 and 20¹ under 35 U.S.C. § 103(a) as being unpatentable over Ault et al. (Ault) in view of McComas et al. (McComas), and the rejection of appealed claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Ault in view of McComas, as applied to appealed claims 11

¹ These are all of the claims in the application. See the amendments of January 13, 1999 (Paper No. 7).

and 13 through 17, 19 and 20² further in view of the state of the prior art admitted by appellants in the specification (background of the Invention). For the reasons pointed out by appellants in the brief, the examiner has failed to make out a *prima facie* case with respect to both grounds of rejection.

We find that, when considered in light of the written description in the specification as interpreted by one of ordinary skill in this art, *see, e.g., In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000); *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997), *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), the plain language of appealed claim 1 requires that the claimed method comprises at least the steps of removing a thermal-insulating ceramic layer bonded to a component having a cooling hole through a specified bond coat, from said component including the cooling hole, by (1) subjecting the ceramic layer to a caustic solution “at a temperature and pressure sufficient to cause the caustic solution to attack a chemical bond between the ceramic layer and the bond coat; and [(2)] then removing the portion of ceramic layer from the cooling hole by directing into the cooling hole a fluid stream” as specified, such that the latter step does not remove the bond coat from the wall of the cooling hole.

A *prima facie* case of obviousness is established by showing that some objective teaching, suggestion or motivation in the applied prior art taken as a whole and/or knowledge generally available to one of ordinary skill in the art would have led that person to the claimed invention as a whole, *including each and every limitation of the claims*, without recourse to the teachings in appellants’ disclosure. *See generally, In re Rouffet*, 149 F.3d 1350, 1358, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998); *Pro-Mold and Tool Co. v. Great Lakes Plastics Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629-30 (Fed. Cir. 1996); *In re Fritch*, 972 F.2d 1260, 1265-66, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992); *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Laskowski*, 871 F.2d 115, 10 USPQ2d 1397 (Fed. Cir. 1989); *In re Fine*, 837 F.2d 1071, 1074-76, 5 USPQ2d 1596, 1598-1600 (Fed. Cir. 1988).

We agree with appellants that the combined teachings of Ault and McComas would not

² Answer, pages 3-8 as numbered from unnumbered page 1.

have suggested the claimed process to one of ordinary skill in this art (brief and reply brief in entirety). Indeed, we, like appellants, cannot find the combination of treating a component having a particular bond coat in a cooling hole with caustic solution so as to attack a chemical bond between a ceramic layer and the bond coat, followed by treatment with a fluid stream discharge such that the ceramic coating of the cooling hole will be removed without removing the bond coat therein. Because the process of Ault only cleans the debris from a cooling hole “without attacking or damaging the coatings or base metal of the articles” (e.g., col. 1, ll. 60-63; see also col. 2, ll. 42-43), the examiner correctly finds that the only place that one of ordinary skill in this art would add the process of McComas to that of Ault is in the “second step (stripping the old external coating)” of the “total process of repairing a gas turbine blade” (answer, page 5 as numbered from unnumbered page 1; see also Ault, col. 2, ll. 40-41 and 43-44). However, McComas does not disclose either the bond coat or the use of a chemical solution in a manner to attack a chemical bond between the bond coat and ceramic layer as required by the appealed claims.

Accordingly, it is inescapable that the combined references applied by the examiner taken as a whole would not have resulted in the claimed method. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1050-54, 5 USPQ2d 1434, 1438-41 (Fed. Cir. 1988).

The examiner's decision is reversed.

Reversed

CHARLES F. WARREN
Administrative Patent Judge

THOMAS A. WALTZ
Administrative Patent Judge

PETER F. KRATZ
Administrative Patent Judge

)
)
)
)
)
) BOARD OF PATENT
) APPEALS AND
) INTERFERENCES
)
)
)
)

Appeal No. 2000-0821
Application 08/886,504

General electric Company
One Neumann Way H 17
Cincinnati, OH 45215-6301