

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 29

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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

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Ex parte FRED MACCIOCCHI

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Appeal No. 2003-2125  
Application No. 09/168,153

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ON BRIEF

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

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 6 and 9 to 14. Claims 7 and 15 have been objected to as depending from a non-allowed claim. Claims 8 and 16 have been canceled.

We REVERSE.

### BACKGROUND

The appellant's invention generally relates to nuclear medicine, and systems for obtaining nuclear medicine images of a patient's body organs of interest. In particular, the appellant's invention relates to systems and methods for obtaining nuclear medicine images by detecting coincident events resulting from positron annihilation (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

Claims 1 to 6 and 9 to 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,866,907<sup>1</sup> to Drukier et al. (Drukier).

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the final rejection (Paper No. 17, mailed December 19, 2001) and the answer (Paper No. 22, mailed August 23, 2002) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 21, filed June 10, 2002) and reply brief (Paper No. 23, filed October 23, 2002) for the appellant's arguments thereagainst.

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<sup>1</sup> Issued February 2, 1999.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellant 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.<sup>2</sup> Accordingly, we will not sustain the examiner's rejection of claims 1 to 6 and 9 to 14 under 35 U.S.C. § 103. Our reasoning for this determination follows.

Most if not all inventions arise from a combination of old elements. See In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. See id. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See id. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the appellant. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d

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<sup>2</sup> 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).

1635, 1637 (Fed. Cir. 1998); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). When obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000).

In the rejection before us in this appeal, the examiner determined that it would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify Drukier to apply it to a radiation field comprising radioisotopes involving positron annihilation. We do not agree. In our view, there is no suggestion or motivation in Drukier to modify the teachings of that reference to apply it to a radiation field comprising radioisotopes involving positron annihilation. While obtaining nuclear medicine images by detecting coincident events resulting from positron annihilation was known in the art, we agree with the appellant that there is no teaching or suggestion in Drukier to have modified Drukier so as to arrive at the claimed subject matter. Accordingly, the decision of the examiner to reject claims 1 to 6 and 9 to 14 under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 6 and 9 to 14 under 35 U.S.C. § 103 is reversed.

REVERSED

CHARLES E. FRANKFORT  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

JOSEPH L. DIXON  
Administrative Patent Judge

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