

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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 MICHAEL R. BECWAR
and THOMAS D. BLUSH

Appeal No. 93-3117
Application 07/717,042¹

ON BRIEF

MAILED

JAN 31 1996

PAT.&T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before WILLIAM F. SMITH, GRON and ELLIS, Administrative Patent Judges.

WILLIAM F. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 2 and 4 through 9, all the claims in the application.

Claim 1 is illustrative of the subject matter on appeal and reads as follows:

¹ Application for patent filed June 18, 1991.

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1. A process for the production of isogenic cell lines from conifers, comprising:

- (a) dissecting an immature conifer seed and removing zygotic embryo-containing megagametophyte,
- (b) placing said megagametophyte on a culture induction medium for 4 to 56 days to induce extrusion of embryogenic tissue comprising zygotic embryos,
- (c) isolating and extracting the individual embryos from the extruded tissue, and
- (d) transferring said isolated individual embryos to appropriate culture induction medium to permit the individual cell lines to proliferate.

The reference relied upon by the examiner is:

Gupta et al. (Gupta) 4,957,866 Sep. 18, 1990

Claims 1, 2 and 4 through 9 stand rejected under 35 U.S.C. § 103 as unpatentable over Gupta. We reverse.

The claimed invention is directed to a method for producing isogenic cell lines from conifers. To this end, immature conifer seeds are dissected and the zygotic embryo-containing megagametophyte is removed. The megagametophyte is cultured under conditions such that extrusion of embryogenic tissue comprising zygotic embryos is induced. The individual embryos contained in the extruded tissue are isolated, extracted and transferred to appropriate culture-induction medium to permit the individual cells lines to proliferate.

Gupta is directed to a method for reproducing conifers by somatic embryogenesis. To this end, a suitable explant material

is placed on an induction culture medium. Gupta sets forth at column 4, lines 1-17, that seed embryos are preferred explant material with embryos from immature seeds being highly preferred. The focus of the invention described in Gupta is set forth at column 6, lines 56-58, as "the careful control of the osmotic potential of each of the media used in the various culturing stages." Thus, Gupta places no emphasis on the explant used as the starting material in the process apart from preferring immature embryos. As set forth in Example 1 of Gupta, immature embryos were obtained by dissecting seeds 4 to 5 weeks after fertilization.

The advantage of using the claimed procedure over the specific procedure described by Gupta is set forth in the specification beginning at page 7, lines 12-page 8, line 2 as follows:

The process is more efficient than isolating individual zygotic embryos prior to extrusion and culturing them individually. That is, if one were to attempt to isolate individual zygotic embryos before the extrusion event, it can not be determined which embryos are subsequently going to extrude from the seed and proliferate to form an embryogenic culture. Therefore, one would need to isolate many more individual zygotic embryos in order to ensure that responsive embryos are obtained which will proliferate to form embryogenic tissue.

Thus, this process utilizes the extrusion event in order to selectively isolate embryos that have already shown potential for proliferation. In addition, after the extrusion event it is also much easier to isolate individual embryos from the extruded embryogenic tissue (which is now easily accessible outside of the confinement of the megagametophyte tissue). By contrast,

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it is much more difficult to excise zygotic embryos prior to the extrusion event from within the corrosion cavity of the intact megagametophyte.

As further explained at page 9, lines 7-10 of the specification, the present invention "avoids having to dissect individual zygotic embryos out of the megagametophyte by relying on the extrusion event to position the embryos outside the megagametophyte for relatively easy isolation."

Thus, the issue becomes whether at the time of the present invention one of ordinary skill in the art would have found it obvious to "[rely] on the extrusion event to position embryos outside the megagametophyte for relatively easily isolation" instead of dissecting immature embryos from seeds 4 to 5 weeks after fertilization as taught by Gupta. The examiner's position in regard to why one of ordinary skill in the art would have found it obvious to modify Gupta in the manner needed in order to arrive at the present invention has varied over the prosecution of this case. At page 3 of the final rejection, the examiner stated that "It would be [sic, have been] 'obvious to try' a different stage of developing embryos employing well-known techniques of the art to establish isogenic cell lines." Not surprisingly, the examiner distanced herself from the "obvious to try" standard for determining obviousness under 35 U.S.C. § 103 in the Answer, stating at page 4 that "it is [sic, would have been] obvious to merely substitute one somatic cell for another

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in an earlier stage of its development and to employ basically the same method used before could achieve the same expected results." [emphasis added]. The examiner went on to state at page 4 of the Answer that "It is well known in the art that the megagametophyte derived from immature seed coat contains zygotic embryos" in that the claimed process is "similar to the somatic embryogenesis method taught by Gupta et al."

It is apparent from a review of this record that the examiner has not used the correct standard for determining obviousness under 35 U.S.C. § 103. The standard is not whether it would have been "obvious to try," nor is it that one could have made the claimed invention. See In re O'Farrell, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988); In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). The examiner's error in not using a correct standard of obviousness under 35 U.S.C. § 103 is compounded in this appeal since she has ignored all of the evidence of nonobviousness relied upon by appellants in their Appeal Brief. In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986) ["If a prima facie case is made in the first instance, and if the applicant comes forward with reasonable rebuttal, whether buttressed by experiment, prior art references, or argument, the entire merits of the matter are to be reweighed. In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984)]. Here, appellant relies upon the declaration filed by

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Dr. David S. Canavera under 37 C.F.R. § 1.132 (Appeal Brief, page 9). In addition, several technical articles are relied upon in the Appeal Brief in support of the position taken by appellants and Dr. Canavera.²

The examiner's response to the arguments set forth in the Appeal Brief is set forth in a single paragraph which bridges pages 4-5 of the Examiner's Answer and reads as follows:

Further appellants' arguments are not persuasive of error in the position that a prima facie case of obviousness is established by the cited reference. Also there is no clear and convincing evidence of unexpected results which supports appellants' allegations of criticality or the nonobvious nature of the claimed process, especially since it appears new issues have been introduced. Thus, the claims are properly rejected under 35 U.S.C. 103.

No mention or analysis of Dr. Canavera's declaration and the supporting articles is set forth in the Examiner's Answer.

The examiner has not begun to establish in the first instance that one of ordinary skill in the art would have found it obvious to modify the procedure of Gupta in the manner required in order to arrive at the claimed procedure. The Examiner's Answer does not even mention the requirement of the claimed procedure of inducing extrusion of embryonic tissue which is

² Appellants state in the paragraph bridging pages 9-10 of the Appeal Brief that these articles were "cited in the application and the Information Disclosure Statement." However, it does not appear that an Information Disclosure Statement has been filed in this application or that any of the articles relied upon have been made of record in this application.

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the key to the present invention. On this record, we agree with appellants that a consideration of Gupta by itself would not have rendered the claimed invention obvious within the meaning of 35 U.S.C. § 103 and, accordingly, reverse the rejection.

REMAND

As explained above, it is apparent that the examiner has not properly considered the issue of obviousness as it arises in this patent application. The examiner has not used the right standard of obviousness under the statute. Nor has she considered all relevant evidence bearing on this issue. In this regard, we note that appellants' description of the references cited and relied upon in the Appeal Brief indicates that these references are concerned with the extrusion event which forms the basis of appellants' invention. The examiner should see to it that all relevant prior art has been obtained, considered and properly cited in this patent application. If upon this review, the examiner determines that the subject matter of the claims on appeal would have been obvious using a correct standard of obviousness, after taking into account all evidence relied upon by appellants, prosecution should be reopened and an appropriate rejection should be instituted.

This application, by virtue of its "special" status, requires an immediate action, M.P.E.P. § 708.01(d). It is impor-

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tant that the Board be informed promptly of any action affecting
the appeal in this case.

REVERSED and REMANDED

William F. Smith
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Administrative Patent Judge)
)
Teddy S. Gron
TEDDY S. GRON)
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Joan Ellis
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BOARD OF PATENT
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