

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CRAIG M. MEYERS and LAIMONIS A. LAIMINS

Appeal No. 1997-3944
Application No. 08/208,807

ON BRIEF

Before WINTERS, WILLIAM F. SMITH, and ADAMS, Administrative Patent Judges.

ADAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 2, 4-8, 13, 15, and 16. Claims 3 and 14 are canceled. Claims 9-12 are withdrawn from consideration¹ as drawn to a non-elected invention.

Claim 1 is illustrative of the subject matter on appeal and is reproduced below:

1. A process of biosynthesizing papillomavirus in an epithelial cell containing papillomavirus DNA but not papillomavirus particles comprising inducing differentiation of said epithelial cell by exposing said epithelial cell to a protein kinase C inducer.

The references relied upon by the examiner are:

¹ Paper No. 16, mailed October 19, 1994.

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Bedell et al. (Bedell), "Amplification of human papillomavirus genomes in vitro is dependent on epithelial differentiation," J. Virology, Vol. 65, No. 5, pp. 2254-2260 (1991)

Davies et al. (Davies), "Induction of epstein-barr virus lytic cycle by tumor-promoting and non-tumor-promoting phorbol esters requires active protein kinase C," J. Virology, Vol. 65, No. 12, pp. 6838-6844 (1991)

Dollard et al. (Dollard), "Production of human papillomavirus and modulation of the infectious program in epithelial raft cultures," Genes & Development, Vol. 6, pp. 1131-1142 (1992)

Li et al. (Li), "Epstein-Barr virus infection and replication in a human epithelial cell system," Nature, Vol. 356, pp. 347-350 (1992)

GROUND OF REJECTION²

Claims 1, 2, 4-8, 13, 15, and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over Bedell in view of Davies or Li and appellants' admissions.

We reverse.

DISCUSSION

It is well-established that before a conclusion of obviousness may be made based on a combination of references, there must have been a reason, suggestion or motivation to lead an inventor to combine those references. Pro-Mold and Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629 (Fed. Cir. 1996). In this regard, the examiner directs our attention to Paper No. 16³ for his reasoning in support of this rejection. According to the examiner (Paper No. 16, page 3) Bedell indicate "that replication of HPVs in epithelial cells in vitro may

² We note the examiner's Supplemental Answer (Paper No. 27, mailed July 1, 1996) withdrew the new ground of rejection under 35 U.S.C. §102(a)/103 over Dollard, presented in the examiner's Answer (Paper No. 25, mailed February 23, 1996).

³ Non-Final Rejection, mailed October 19, 1994.

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have been controlled by a mechanism similar to that operable in Epstein-Barr virus (EBV).” The examiner relies on Davies and Li (Paper No. 16, page 4) to teach the ability of a protein kinase C inducer (TPA) to either “induce EBV infected cells from the latent to lytic cycle” (Davies) or to induce “productive EBV virus production” (Li).

The examiner argues (Paper No. 16, page 5) that Bedell:

hypothesized that some similarities between the [sic] EBV and HPV might exist with regard to the mechanisms governing latent vs. productive (lytic) infections and that production of HPV might be controlled by inducing cellular differentiation since it had been well known that HPV replication in vivo was coupled to cellular differentiation (See Introduction, 2nd paragraph).

The examiner then finds (Paper No. 16, page 5):

With this suggestion of Bedell et al., the ordinary skilled artisan would have been motivated to use the teachings of Davies et al. or Yi [sic] et al. on the use of a promoter of cellular differentiation such as a protein kinase C inducer (TPA) which was known to efficiently induce EBV cells from the latent to the productive or lytic state in order to induce the differentiation of epithelial cells and the production of HPV in said cultured epithelial cells.

The examiner’s rejection is based on a relationship between HPV and EBV, which according to the examiner is taught by Bedell. However, according to appellants’ (Brief⁴, page 12) “there is no motivation for one working with HPV to look to conditions that may work with EBV.” Considering Bedell for what it fairly teaches one of ordinary skill in the art we find only one citation to EBV in the Bedell reference (page 2259, first column, last paragraph) which states “[a]s is the case with Epstein-Barr virus, it is possible that two different HPV origins of replication exist which have distinct roles in basal and suprabasal cells” [emphasis added,

⁴ Paper No. 24, November 6, 1995.

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citation omitted]. We fail to see how the examiner finds, in this one sentence, that a sufficient relationship exists between HPV and EBV to support the combination of Bedell with Davis, Li and “appellant’s admission.” It is also unclear to us where in the Bedell reference support is found for the examiner’s argument (Paper No. 16, page 5) that Bedell “hypothesized ... similarities between EPV and HPV.” We remind the examiner that “it is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art.” In re Wesslau, 353 F.2d 238, 241, 147 USPQ 391, 393 (CCPA 1965); see also In re Mercer, 515 F.2d 1161, 1165-66, 185 USPQ 774, 778 (CCPA 1975).

We further remind the examiner that “[t]he Patent Office has the initial duty of supplying the factual basis for its rejection. It may not, because it may doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis.” In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968). On the record before us, we find no reasonable suggestion for combining the teachings of the references relied upon by the examiner in a manner which would have reasonably led one of ordinary skill in this art to arrive at the claimed invention. As appellants explain (Brief, pages 9-10) Davies and Li do not teach HPV, nor does that portion of appellants’ specification relied on by the examiner. Therefore, these teachings fail to make up for the deficiency of Bedell.

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The initial burden of presenting a prima facie case of obviousness rests on the examiner. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). On these facts, the examiner failed to provide the evidence necessary to support a prima facie case of obviousness. Where the examiner fails to establish a prima facie case, the rejection is improper and will be overturned. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Accordingly, the rejection of claims 1, 2, 4-8, 13, 15 and 16 under 35 U.S.C. § 103 as being unpatentable over Dedell in view of Davies or Li and appellants' admissions is reversed.

REVERSED

SHERMAN D. WINTERS)
Administrative Patent Judge)
) BOARD OF PATENT
)
WILLIAM F. SMITH) APPEALS AND
Administrative Patent Judge)
) INTERFERENCES
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DONALD E. ADAMS)
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