

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 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 GUNTER A. HOFMANN

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Appeal No. 1999-2539  
Application No. 08/328,895

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ON BRIEF

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Before COHEN, NASE, and BAHR, Administrative Patent Judges.  
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection (Paper No. 18, mailed March 27, 1998) of claims 1 to 3 and 5 to 22, which are all of the claims pending in this application.<sup>1</sup>

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<sup>1</sup> Claims 1, 13 and 20 were amended subsequent to the final rejection.

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We REVERSE.

BACKGROUND

The appellant's invention relates to the treatment of ailments in humans and other mammals, and more particularly, to an apparatus and method for *in vivo* delivering of pharmaceutical compounds and genes into live cells of a patient (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Marshall, III 1990	4,906,576	Mar. 6,
Chang 1990	4,970,154	Nov. 13,
Weaver et al. 1991 (Weaver)	5,019,034	May 28,

Claims 1 to 3 and 5 to 22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Weaver in view of Marshall and Chang.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the first Office action (Paper No. 4, mailed September 28, 1995) and the answer (Paper No. 26, mailed January 11, 1999) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 25, filed November 16, 1998) and reply brief (Paper No. 27, filed March 3, 1999) for the appellant's arguments thereagainst.

#### 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 references, 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. Accordingly, we will not sustain the examiner's rejection of claims 1 to 3 and 5 to

22 under 35 U.S.C. § 103. Our reasoning for this determination follows.

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). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

All the method claims on appeal include the step of "providing an inductance device including an induction coil, the induction coil comprising at least one conductor having opposite ends adapted for connection to an electrical power source and at least one turn forming a coil intermediate the ends." Similarly, all the apparatus claims on appeal include the limitation "induction means including an induction coil

comprising at least one conductor having opposite ends adapted for connection to an electrical power source and at least one turn forming a coil intermediate the ends."

After reviewing the entire teachings of the applied prior art, we find ourselves in agreement with the appellant (brief, pp. 5-10) that even if the prior art were combined in the manner set forth in the rejection under appeal it would not provide the claimed invention. In that regard, the combined teachings of the applied prior art do not teach or suggest "an induction coil comprising at least one conductor having opposite ends adapted for connection to an electrical power source and at least one turn forming a coil intermediate the ends" as recited in the claims under appeal. The examiner's position that this induction coil limitation is met by the electrodes disclosed in the applied prior art is without merit for the reasons provided by the appellant in his brief. Moreover, it is abundantly clear that the electrodes disclosed in the applied prior art are not formed by "at least one conductor having opposite ends adapted for connection to an electrical power source."

Additionally, we find ourselves in agreement with the appellant that the applied prior art does not teach or suggest a method or apparatus for *in vivo* introduction of molecules into living blood cells of a patient. Absent the use of impermissible hindsight<sup>2</sup>, it is our view that it would not have been obvious at the time the invention was made to a person having ordinary skill in the art to have combined the applied prior art to meet the following limitations:

(1) applying time varying electric signals to the applied inductance device to generate time varying magnetic fields and repeatedly subject a quantity of blood flowing past the preselected location in the selected blood vessel to electric fields of a predetermined amplitude and duration, induced by the time varying magnetic fields, sufficient to make walls of preselected cells in said quantity of blood transiently permeable to permit the molecules to enter said preselected cells without killing said cells (claim 1);

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<sup>2</sup> See, for example, W. L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

(2) means for applying time varying electric signals to said induction coil for causing it to repeatedly generate magnetic fields and induce electric fields of a predetermined amplitude and duration sufficient to make walls of preselected cells in blood flowing past the preselected location in the blood vessel to be transiently permeable to permit the molecules to enter said preselected cells without killing said cells (claim 11); and

(3) applying a time varying electric signal to the applied inductance device to generate time varying magnetic fields and repeatedly subject tissue cells at the preselected location in the selected tissue to induce electric fields of a predetermined amplitude and duration sufficient to make the walls of preselected cells in the tissue transiently permeable to permit the molecules to enter said preselected cells without killing said cells (claim 21).

For the reasons set forth above, the subject matter of the claims under appeal would not have been suggested by the applied prior art. Accordingly, the decision of the examiner to reject claims 1 to 3 and 5 to 22 under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 3 and 5 to 22 under 35 U.S.C. § 103 is reversed.

REVERSED

IRWIN CHARLES COHEN	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
JEFFREY V. NASE	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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	)	
JENNIFER D. BAHR	)	
Administrative Patent Judge	)	

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APPLICATION NO. 08/328,895

APJ NASE

APJ BAHR

APJ COHEN

DECISION: **REVERSED**

Prepared By: Gloria Henderson

**DRAFT TYPED:** Feb 16, 2000

**FINAL TYPED:**