

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte THOMAS L. AFILANI

Appeal No. 2001-2035
Application No. 09/071,806

ON BRIEF

Before KRASS, LALL and SAADAT, Administrative Patent Judges.
KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-14 and 16. Claim 15 has been indicated by the examiner as being directed to allowable subject matter and is not before us on appeal.

The invention relates to utilizing the principles of dielectrophoresis to locate animate entities, such as a human

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heart and conductive nerves, whether or not there are obscuring material structures. While the prior art detected animate objects by measuring changes in an electrostatic field, the instant invention uses a force resulting from the non-uniform electric field squared spatial gradient three-dimensional pattern exhibited uniquely by an entity to indicate the precise location and line-of-bearing direction of the entity relative to a human operator of the inventive device. Employing the principles of dielectrophoresis, a force is induced and subsequent resulting torque on an antenna and other component parts of the device give a rapid line-of-bearing directional location indication of the subject entity.

Representative independent claim 1 is reproduced as follows:

1. A locating device comprising a polarization unit that detects a polarization charge pattern by a manifested dielectrophoresis force in accordance with a spatially non-uniform electric field exhibited by a target entity.

The examiner relies on the following reference:

Bakhoun	5,300,889	Apr. 5, 1994
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Claims 1, 7 and 10-12 stand rejected under 35 U.S.C. 102(b) as anticipated by Bakhoun.

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Claims 2-6, 8, 9, 13, 14 and 16 stand rejected under 35 U.S.C. 103 as unpatentable over Bakhoun.

Reference is made to the briefs and answer for the respective positions of appellant and the examiner.

OPINION

With regard to independent claims 1 and 12, even though the claimed subject matter appears very broad in scope, each of the claims requires a detection of a polarizing charge pattern "by a manifested dielectrophoresis force" in accordance with a spatially non-uniform electric field exhibited by the target entity.

Bakhoun mentions nothing about detection "by a manifested dielectrophoresis force" in accordance with a spatially non-uniform electric field exhibited by a target entity. Yet, the examiner contends that the needle in Bakhoun produces an electric force "which is the same as the dielectrophoresis force" [answer-page 4]. The examiner has offered no support for this conclusion.

In response to appellant's urging that Bakhoun does not remotely comprise structure that enables detection of a

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polarization charge pattern by a manifested dielectrophoresis force in accordance with a spatially non-uniform electric field exhibited by a target entity and that Bakhoun is inapplicable to dielectrophoresis, the examiner states that "all the objects are *inherently* included the polarization charge pattern by a manifested dielectrophoresis force in the nature [sic]" [answer-page 7] [emphasis added].

The examiner cannot properly assert *inherency* at the very point of novelty of the instant claimed invention.

Moreover, that which is inherent is not, necessarily, known. In re Spormann, 363 F.2d 444, 150 USPQ 449 (CCPA 1966).

Even if such phenomena were naturally occurring, this does not necessarily mean that a means for, or step of, actually detecting a polarization charge pattern by a manifested dielectrophoresis force in accordance with a spatially non-uniform electric field exhibited by a target entity would be a natural occurrence. Thus, the instant claimed invention provides a way of actually detecting something which might occur in nature and such *detection* cannot merely be dismissed as inherently occurring in nature.

Since Bakhoun does not, in any way, relate to dielectrophoresis force or to dielectrokinesis effects, as

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required by the instant claims, it cannot be a proper reference for anticipating the instant claimed invention under 35 U.S.C. 102(b) or for finding the claimed subject matter obvious under 35 U.S.C. 103.

Although the instant claimed subject matter has a very broad scope, we cannot sustain either the rejection of claims 1-7 and 10-12 under 35 U.S.C. 102(b) or the rejection of claims 2-6, 8, 9, 13, 14 and 16 under 35 U.S.C. 103, based on the reference to Bakhom.

The examiner's decision is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
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PARSHOTAM S. LALL)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
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MAHSHID D. SAADAT)	
Administrative Patent Judge)	

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