

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

This opinion (1) was not written for publication and (2) is not binding precedent of the Board.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 JOHN F. SCARZELLO,
DANIEL S. LENKO, and ADAM C. FEAGA

Appeal No. 95-5091
Application No. 08/054,166¹

ON BRIEF

Before HAIRSTON, JERRY SMITH, and TORCZON, Administrative Patent Judges.

TORCZON, Administrative Patent Judge.

DECISION ON APPEAL

BACKGROUND

This is an appeal under 35 U.S.C. § 134 from the final rejection of claim 32 under 35 U.S.C. § 103. At the end of extensive, and contentious, briefing by the examiner and Appellants, all other pending claims, claims 1-31, stand allowed. We affirm.

¹ Navy Case No. 75,175.

The subject matter of the invention is a vehicle detector for installation in a roadway surface. Claim 32 states the claimed subject matter as follows:

32. A sensing system for highway vehicles travelling on a roadway surface, comprising:

a pair of sensors mounted below said roadway surface and spaced from each other by a predetermined distance in a direction substantially parallel to said travelling of the highway vehicles on the roadway surface;

data processing means connected to said sensors for determining speed and length of the highway vehicles as a function of differential [sic] between field signatures respectively measured by said sensors and the predetermined distance therebetween;

magnetometer means mounted in operative proximity to said sensors for measuring a magnetic field having a first component substantially parallel to said roadway surface and a second component substantially perpendicular to the first component; and

means operatively connecting the magnetometer means to the data processing means for also determining vehicle presence on the roadway surface as a function of said components of the magnetic field measured by the magnetometer means.

(Paper No. 10 (Admt. filed 26 July 1994) at 1-2 (indentation added).)

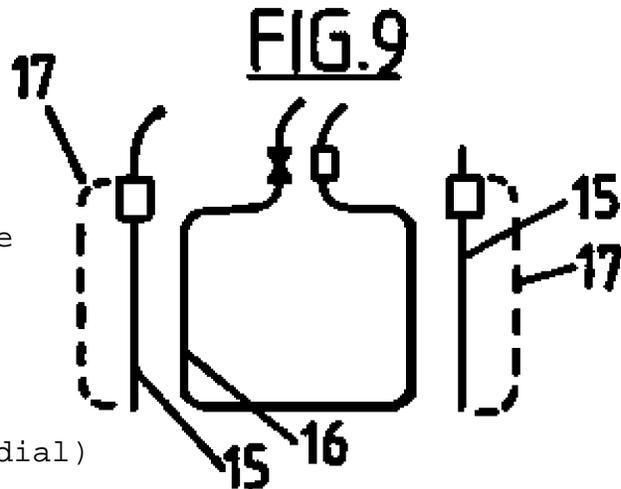
The examiner relies on the combination of the following references in maintaining the rejection:

Scarzello et al. (Scarzello)	4,302,746	24 Nov. 1981
Gebert et al. (Gebert)	5,008,666	16 Apr. 1991

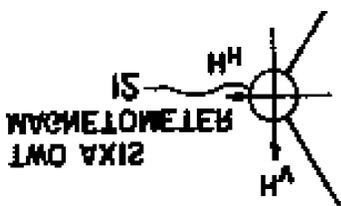
DISCUSSION

Gebert teaches detection of vehicle presence, length, and speed using paired coaxial cables. (Abstract.) The cables may be embedded below the roadway surface. (6:12-27; Fig. 1.) Appellants' sensor limitation corresponds to Gebert's coaxial cables.

"The twin coax cable layout is preferably used in combination with a vehicle presence detector of any suitable type." (10:20-22.) Gebert's Figure 9 (right) shows a loop detector 16 located in close (medial) proximity to the coaxial cable sensors 15. (10:22-27.)



Scarzello teaches vehicle detection using a magnetometer that



detects both horizontal and vertical vehicle signal components. (2:41-47; 3:14-33.) The examiner substitutes Scarzello's magnetometer for Gebert's loop sensor 16.

(E.g., Paper No. 20 at 5 (noting that any suitable detector may be used) and at 5-6 (noting the magnetometer's installation and power consumption benefits).)

Appellants' contention that Scarzello would not suggest a perpendicular component is not consistent with the text of the reference or their specification. The magnetometer's horizontal component is parallel to the roadway surface and the vertical component is perpendicular to the horizontal component. Their specification concedes that a person having ordinary skill in the art could readily adapt the Scarzello magnetometer system to other axes. (Paper No. 1 at 9.) In view of the arguments of

record, the preponderance of evidence supports the examiner's conclusion.

DECISION

We affirm the rejection of claim 32 under section 103.
The period for taking any subsequent action in connection with

this appeal will be extended only under the limited
circumstances provided in 37 CFR § 1.136(b).

AFFIRMED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JERRY SMITH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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RICHARD TORCZON)	
Administrative Patent Judge)	

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