

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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT LEON BENEDICT, FRANZ JOSEF HILLENMAYER,
BRIAN MATTHEW LOGAN, ANTHONY WILLIAM PARSONS,
CHRISTIAN JOHANN KARL JOSEF SCHNEIDER,
and GARY EDWIN TUBB

Appeal 2007-0415
Application 10/320,947
Technology Center 1700

Decided: January 31, 2007

Before EDWARD C. KIMLIN, CATHERINE Q. TIMM, and JEFFREY T. SMITH, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 and 3-20. Claim 1 is illustrative:

1. An annular apparatus comprising:

a transponder;

an annular antenna coupled to the transponder, the antenna being formed from a resilient conductive material and extending along a wavy path to form a continuous loop;

the annular antenna loop having a diametric size suitable for attaching the coupled antenna and transponder to an internal lower sidewall portion of a tire.

The Examiner relies upon the following references in the rejection of the appealed claims:

Fritze	US 3,662,335	May 9, 1972
Polson	US 3,852,758	Dec. 3, 1974
Dunn	WO 99/29522	Jun. 17, 1999
Pollack	WO 99/29525	Jun. 17, 1999
Nigon	US 2002/0190853 A1	Dec. 19, 2002

Appellants' claimed invention is directed to an annular apparatus that is used to monitor at least one parameter in a tire comprising a transponder, and an annular antenna coupled to the transponder that forms a continuous loop and is attached to the lower sidewall portion of the tire. The antenna is formed of a resilient conductive material and extends along a wavy path.

Appealed claims 1 and 3-6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Dunn. Claims 1 and 3-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nigon in view of Dunn and further in view of Polson, Fritze, and Pollack.

Appellants do not present separate arguments for the claims rejected under Section 102. Accordingly, claims 1 and 3-6 stand or fall together with claim 1 with respect to the Section 102 rejection.

We have thoroughly reviewed each of the arguments advanced by Appellants. However, we are in complete agreement with the Examiner's reasoned and thorough analysis of the prior art, as well as his cogent disposition of the arguments raised by Appellants. Accordingly, we will adopt the Examiner's reasoning as our own in sustaining the rejections of record, and we add the following for emphasis only.

We consider first the Examiner's rejection under § 102 over Dunn. A principal argument of Appellants is that Dunn does not disclose the presently claimed annular antenna that forms a continuous loop. However, since Dunn clearly discloses that the opposing ends of annular antenna wire 91 are connected to the opposite ends of magnet wire 97a at terminals 98a and 98b (Fig. 9), we fully concur with the Examiner that Dunn fairly describes a continuous annular loop for the antenna within the meaning of § 102. As emphasized by the Examiner, the claims on appeal do not require that the continuous loop is formed from only one wire but, rather, encompass a continuous loop formed from connected wires, as disclosed by Dunn. Appellants' argument that "[t]he antenna of Dunn is interrupted by termination of the antenna ends to the chips 28" (Br. 5, first ¶) is not focused upon Figure 9 of the reference.

Appellants also contend that Dunn does not teach that the antenna has a diametric size suitable for attaching to the internal lower sidewall portion of a tire, as recited in claim 1. However, we agree with the Examiner that the claim recitation fails to impart any particular structure to the antenna but, instead, is contingent upon the relationship between the size of the antenna and the size of the tire to which it may be attached. Manifestly, the annular antenna of Dunn is capable of being attached to the lower sidewall of an

appropriately sized tire. Significantly, the claims are directed to the annular apparatus comprising an antenna and not to the combination of the antenna and a tire. As explained by the Examiner, the claim recitation is directed to the intended use of the antenna with a tire of unspecified size. Also, we note that Appellants have not rebutted the Examiner's reasonable rationale at pages 16-17 of the Answer regarding the breadth of the claim recitation.

We also concur with the Examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 over the collective teachings of Nigon, Dunn, Polson, Fritze, and Pollack. Nigon, like Appellants and Dunn, discloses an annular antenna for a tire, but fails to teach that the antenna is formed of a resilient conductive material that extends along a wavy path to form a continuous loop. However, Dunn evidences the obviousness of forming the antenna from a resilient conductive material and extending it along a wavy path for absorbing the repeated deformations occurring during the use of the tire such that substantial expansion of the antenna is possible when needed. Also Polson evidences the obviousness of employing a ferrite torroidal core for establishing magnetic coupling between the antenna and the transponder. In addition, Fritze is further evidence of the obviousness of locating an annular antenna assembly at a lower side wall region of a tire so that the antenna assembly is not subjected to too great a beating stress or too great a dampening, while Pollack teaches encasing an antenna and a transponder in an insulating rubber in order to form a composite which is protected from stray electrical charges.

Appellants maintain that "there is no teaching or support in Nigon for affixing an annular antenna assembly so configured to an internal lower

sidewall portion” (Br. 6, penultimate ¶). However, for the reasons set forth above, we find that the claim recitation is essentially a statement of intended use that does not serve as a positive limitation with respect to the claimed annular apparatus. Moreover, we agree the Examiner that Nigon would have suggested positioning the annular antenna in the lower sidewall portion of a tire.

Appellants further contend that the present “invention provides a more durable antenna that is protected from breakage to an extent not achieved by the prior art [and] [t]hat such an advantage exists is a fact and not mere argument” (Br. 12, first ¶) . However, as noted by the Examiner, Appellants have not proffered any objective evidence on this record for the requisite factual support for Appellants’ assertion of superior results. Without such objective evidence, Appellants’ plea that such advantage “is a fact and not mere argument” (*id.*) is nothing more than attorney argument. It is well settled that arguments in the Brief cannot take the place of objective evidence. *In re Pearson*, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974). Likewise, Appellants have presented no objective evidence to support the argument that the claimed invention represents a synergistic combination (Br. 17, first ¶).

In conclusion, based on the foregoing and the reasons well stated by the Examiner, the Examiner’s decision rejecting the appealed claims is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2007).

AFFIRMED

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