The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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 JOSEPH V. HAJNAL, MARK BYDDER and DAVID J. LARKMAN

Appeal No. 2005-0186
Application No. 10/126,217

ON BRIEF

Before THOMAS, HAIRSTON and BARRETT, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 1 and 14 on appeal. Representative claim 1 is reproduced below:

> 1. Magnetic resonance imaging apparatus comprising means for exciting magnetic resonant (MR) active nuclei in a region of interest, means for creating magnetic field gradients in a phase-encode direction for spatially encoding the excited MR active nuclei, the number of phase-encode gradients producing a field of view corresponding to the region of interest, an array of at least two r.f. receive coils for receiving data from the region of interest, and means for producing an image by combining signals from the coils of the array, using the relative sensitivity of each coil.

The following reference is relied on by the examiner:

Wang	5,712,567	Jan. 27, 1998

Claims 1 and 14 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Wang.

Rather than repeat the positions of the appellants and the examiner, reference is made to the brief and reply brief for appellants' positions, and to the answer for the examiner's positions.

OPINION

We sustain the rejection of claims 1 and 14 on appeal as being anticipated by Wang. The only feature of claims 1 and 14 argued to us not to be found in Wang relates to the "relative sensitivity of each coil" at the end of these claims.

According to the prior art discussion at column 1 of Wang, it was known to use two sub-arrangements of antennas to produce an enhanced single image. Furthermore, it was known that local antennas used to determine or sense the respective images were also known to have non uniform sensitivities. The art has developed the concept of sensitivity profiles to deal with this, which is a good part of the subject of the invention in Wang as exhibited initially in the title of his invention. In part, as discussed at columns 1 and 2, the physical parameters and

relationships among the antennas relate directly to this respective sensitivity and the sensitivity profiles of the plurality of antennas used in Wang's device.

Based on the discussion at column 4 with respect to figure 1, it appears that each sub group 4, 5 and each coil within each subgroup of antennas 4, 5 in figures 4 and 5 of the reference has its own respective sensitivity. Appellants admit at the middle of page 8 of the principal brief on appeal that Wang teaches multiplying or otherwise combining the signals to the extent such a feature is recited at the end of representative claim 1 on appeal. Furthermore, it appears to us that as recognized by the examiner with respect to figure 2, the combining operation as reflected there mathematically actually "uses" the "relative sensitivity of each [antenna] coil" at least to the extent of the function $E = D \div C$. Appellants' remarks in the brief and reply brief do not argue to us otherwise.

The figure 2 showing of Wang at least broadly compares to appellants' showing in specification figure 8. We note the broad relationships thereof as explained throughout the arguments are reflected in detail in the language of dependent claims 10 through 12. The actual manner in which the relative sensitivity of each coil is determined as disclosed is not

reflected in independent claim 1 but is found only in dependent claims 10 through 12. We will not impute any features recited with respect to these claims into the subject matter of independent claim 1 on appeal.

It is noted with respect to the dialogue between the examiner's responsive arguments portion of the answer and the substance of the reply brief beginning at the middle of page 3 that the term "relative" in its defined sense is always with respect to something. It is significant to note that independent claims 1 and 14 do not recite any feature of the relativity being with respect to anything, thus presenting for our consideration very broad features on appeal subject to much interpretation. Indeed, it may be said that appellants' arguments here are not consistent with the broad recitation in claims 1 and 14. It is believed that our earlier remarks in this opinion directly address the examiner's failure to establish how Wang teaches or suggests using relative sets of each coil as set forth at the top of page 4 of the reply brief.

In view of the foregoing, the decision of the examiner rejecting claims 1 and 14 under 35 U.S.C. § 102 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

JAMES D. THOMAS Administrative Patent Judge	)	
KENNETH W. HAIRSTON Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
LEE E. BARRETT Administrative Patent Judge	)	

JDT:hh

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