

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JUNG-TAO LIU

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Appeal 2008-1132  
Application 10/112,098  
Technology Center 2600

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Decided: June 25, 2008

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Before KENNETH W. HAIRSTON, ANITA PELLMAN GROSS, and  
KEVIN F. TURNER, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from a final rejection of claims 1 to 31. We have jurisdiction under 35 U.S.C. § 6(b).

We will sustain the rejection.

STATEMENT OF THE CASE

Appellant has invented a method of communication that comprises determining a plurality of transmission powers for a corresponding plurality of antennas, and transmitting at least one signal over at least one transmission path using the determined transmission powers. The at least one transmission path is determined in response to characterizing an air interface (Fig. 2; Specification 5 to 9).

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Claim 6 is representative of the claims on appeal, and it reads as follows:

6. A method of communication comprising:  
determining a plurality of transmission powers for a corresponding plurality of antennas; and  
transmitting at least one signal over at least one transmission path using the determined transmission powers, the at least one transmission path determined in response to characterizing an air interface, the at least one transmission path defined by the plurality of antennas.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Farsakh	US 6,317,612 B1	Nov. 13, 2001
Boros	US 6,615,024 B1	Sep. 2, 2003 (filed Apr. 20, 1999)

The Examiner rejected claims 1 to 31 under 35 U.S.C. § 103(a) based upon the teachings of Farsakh and Boros.

#### ISSUE

Appellant contends *inter alia* that the applied references are silent as to determining a plurality of transmission powers for a corresponding plurality of antennas as set forth in the claims on appeal (Br. 5). The issue before us, therefore, is whether the applied prior art teaches or would have suggested to the skilled artisan a method of communicating that includes the step of determining a plurality of transmission powers for a corresponding plurality of antennas?

#### FINDINGS OF FACT

Farsakh describes a mobile communications system with an adaptive antenna that has a corresponding plurality of antennas (col. 7, ll. 32 to 34).

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The mobile communications system is characterized by a GSM air interface communications protocol (col. 6, l. 66 to col. 7, l. 4).

Boros describes a method of communication that uses a plurality of antennas in an adaptive antenna (Fig. 1; Abstract; col. 1, ll. 18 to 21; col. 9, ll. 34 to 37; col. 11, ll. 27 to 31; col. 12, ll. 18 to 35). Boros determines a plurality of transmission powers for the corresponding plurality of antennas, and transmits at least one signal over at least one transmission path using the determined transmission powers (col. 1, ll. 28 to 35; col. 5, ll. 61 to 66; col. 14, ll. 53 to 59). The at least one transmission path is determined in response to characterizing the air interface used in Boros as a “Personal Handyphone (PHS) air interface communication protocol” (col. 11, ll. 31 to 34). A GSM air interface is mentioned as an alternative air interface to PHS (col. 20, ll. 37 to 54).

#### PRINCIPLES OF LAW

The Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). If that burden is met, then the burden shifts to the Appellant to overcome the prima facie case with argument and/or evidence. *See Id.*

The Examiner’s articulated reasoning in the rejection must possess a rational underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

#### ANALYSIS

Although Farsakh does not expressly state that a plurality of transmission powers are determined for the noted plurality of adaptive antennas, we find that the skilled artisan would have known that the plurality of adaptive antennas would have a plurality of transmission powers. Nothing in the claims on appeal precludes the plurality of adaptive antennas

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from transmitting with the same transmission power. In any event, as indicated *supra*, Boros provides evidence that it is well known in the art to determine a plurality of transmission powers for a corresponding plurality of adaptive antennas.

In view of the collectively known teachings, we find that the Examiner has set forth a rational basis for a finding of obviousness.

#### CONCLUSION OF LAW

The Examiner has established the obviousness of claims 1 to 31.

#### ORDER

The obviousness rejection of claims 1 to 31 is affirmed.

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).

AFFIRMED

gvw

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