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V.

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U.S. Patent 7,016,676

Patent Owner's Demonstrative Exhibits

**Before JAMESON LEE, KEVIN F. TURNER,
MICHELLE N. WORMMEESTER, *Administrative Panel***

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'676 Patent to Bernhard Walke and Stefan M

(12) **United States Patent**
Walke et al.

(10) **Patent No.:** US 7,016,676 B2
(45) **Date of Patent:** Mar. 21, 2006

(54) **METHOD, NETWORK AND CONTROL STATION FOR THE TWO-WAY ALTERNATE CONTROL OF RADIO SYSTEMS OF DIFFERENT STANDARDS IN THE SAME FREQUENCY BAND**

(58) **Field of Classification Search** 455/434, 455/435.2, 438, 414.4, 432.2, 207, 553.1, 455/22, 314; 370/464-469, 395.5, 395.52, 370/395.53
See application file for complete search history.

(75) **Inventors:** Bernhard Walke, Wuerselen (DE); Stefan Mangold, Aachen (DE)

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(73) **Assignee:** Koninklijke Philips Electronics N.V., Eindhoven (NL)

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(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 411 days.

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(21) **Appl. No.:** 10/089,959

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(2), (4) **Date:** Apr. 4, 2002

(57) **ABSTRACT**

(87) **PCT Pub. No.:** WO02/13457

The invention relates to an interface-control protocol method for a radio system, which has at least one frequency band provided for the two-way alternate utilization of a first and a second radio interface standard. The radio system comprises a number of stations, which each function in accordance with a first radio interface standard and/or in accordance with a second radio interface standard, in which a control station is provided that controls the two-way alternate utilization of the frequency band.

PCT Pub. Date: Feb. 14, 2002

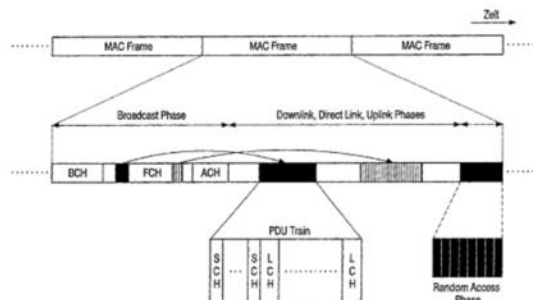
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(51) **Int. Cl.**
H04Q 7/20 (2006.01)

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9 Claims, 3 Drawing Sheets



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Claim 1

1. An interface-control protocol method for a radio system which uses one common frequency band that is provided for alternate use by a first radio interface standard and a second radio interface standard, the radio system comprising:

stations which operate in accordance with a first radio interface standard and/or a second radio interface standard, and

a control station which controls the alternate use of the frequency band;

wherein the control station controls the access to the common frequency band for stations working in accordance with the first radio interface standard and renders the frequency band available for access by the stations working in accordance with the second radio interface standard if stations working in accordance with the first radio interface standard do not request access to the frequency band.

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Claim 6

6. An interface-control protocol method for a radio system which uses one common frequency band that is provided for alternate use by a first radio interface standard and a second radio interface standard, the radio system comprising:

stations which operate in accordance with a first radio interface standard and/or a second radio interface standard, and

a control station which controls the alternate use of the frequency band

wherein the control station terminates the use of the radio system in accordance with the second radio interface standard by transmitting a signal in accordance with the first radio interface standard, without taking into account the resulting interference in stations working in accordance with the second radio interface standard.

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Claim 7

7. An interface-control protocol method for a radio system which uses one common frequency band that is provided for alternate use by a first radio interface standard and a second radio interface standard, the radio system comprising:

stations which operate in accordance with a first radio interface standard and/or a second radio interface standard, and

a control which controls the alternate use of the frequency band

wherein the control station controls the access to the common frequency band by stations working in accordance with the first radio interface standard and in that duration and type of control of the radio interface in accordance with the second radio interface standard is determined by a further signal transmitted to the control station.

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