

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte STANLEY E. KAY

---

Appeal No. 95-3346  
Application 07/953,320<sup>1</sup>

---

ON BRIEF

---

Before URYNOWICZ, KRASS and FLEMING, Administrative Patent Judges.

URYNOWICZ, Administrative Patent Judge.

DECISION ON APPEAL

This appeal is from the final rejection of claims 5-27, all the claims pending in the application.

The invention pertains to a method of transmitting messages. Claims 5 and 12 are illustrative and read as follows:

---

<sup>1</sup> Application for patent filed September 25, 1992. According to appellant, this application is a continuation of Application 07/622,243, filed December 6, 1990.

5. A method for transmitting messages on any of a predetermined plurality of different carrier frequencies comprising:

transmitting a particular message from one station to another station at a first power level, at a first time and on a first carrier frequency; and

transmitting the particular message at a second different power level, at a second different time and on a second different carrier frequency.

12. In a radio telephony system having a plurality of transmitting stations for transmitting information packets to other stations, wherein each information packet is transmitted in one of a plurality of carrier frequency channel slots and wherein some of the slots carry control messages independently of the information packets for controlling the transmission of the information packets between stations, a method for transmitting the control messages comprising:

transmitting a particular control message independently of any information packet from one station to another station in a first slot at a first time and a first carrier frequency the particular control message relating to a particular information packet; and

transmitting the particular control message independently of any information packet in a second slot at a second different time and a second different carrier frequency; and

transmitting the particular information packet in a third slot.

The references relied upon by the examiner as evidence of obviousness are:

French	4,232,392	Nov. 04, 1980
Lee	4,616,364	Oct. 07, 1986
McRae et al. (McRae)	4,639,937	Jan. 27, 1987
Nazarenko et al. (Nazarenko)	4,835,731	May 30, 1989

The appealed claims stand rejected as follows:

Claims 5-10 are rejected under 35 U.S.C. § 103 as unpatentable over Lee in view of French.

Appeal No. 95-3346  
Application 07/953,320

Claim 11 is rejected under 35 U.S.C. § 103 as unpatentable over Lee in view of French and Nazarenko.

Claims 12, 13, 15, 16 and 18-27 are rejected under 35 U.S.C. § 103 as unpatentable over Lee, McRae and Nazarenko.

Claims 14 and 17 are rejected under 35 U.S.C. § 103 as unpatentable over Lee, McRae, Nazarenko and French.

The respective positions of the examiner and the appellant with regard to the propriety of these rejections are set forth in the final rejection (Paper No. 18), the examiner's answer (Paper No. 21), the examiner's answer to the reply brief (Paper No.26), and the appellant's brief (Paper No. 20) and reply brief (Paper No. 22).

#### Appellant's Invention

Appellant's invention relates to a mobile radio telephone system and involves a method for transmitting a control message over a fading or shadowed, error-prone channel. Each time a message for controlling an information packet is to be transmitted, the message is transmitted at different times, at different power levels and on different frequencies. Preferably, three transmissions are made, each at a different time, power level and frequency. Figure 6 is a chart illustrating subslots in a repeating frame used for transmission of a control message. Each slot 1-6 includes four subslots. Each slot is at a different frequency and each slot succeeds a previous slot in

time. Figure 6 illustrates a reverse allocation request, that is, a request from a mobile station to allocate a channel to the mobile station. The reverse allocation request is transmitted in the third subslot of slot 2, the fourth subslot of slot 4 and the second subslot of slot 5. In Figure 6 the request is transmitted at three different times, in three different slots, and on three different frequencies.

The Rejection under 35 U.S.C. §103  
Claims 5-10

After consideration of the positions and arguments presented by both the examiner and the appellant, we will sustain the rejection of claims 5, 6 and 10 but will not sustain the rejection of claims 7-9. With respect to the rejection of claims 5, 6 and 10, we agree in general with the comments made by the examiner; we add the following discussion for emphasis.

At page 5 of the reply brief, appellant contends that there is no suggestion in the references, Lee and French, that they are combinable and urges that "...the environments in which they operate and the solutions that they teach are very different." Appellant urges that "...the Examiner has made no showing that it would be obvious to combine them."

Contrary to appellant's position, the examiner has stated to the effect that the suggestion to combine the teachings of Lee and French, each of which relates to radio transmission in mobile phone environments, stems from the fact that the teachings of the references are to protect and preserve radio telephone messages. We agree with the examiner's position. Protection and preservation of the

transmitted signal in Lee is accomplished by providing time and frequency

diversity of the signal and in French the same is accomplished by providing time and power diversity of the signal. One of ordinary skill in the art at the time the invention was made would have recognized that the power diversity teaching of French with respect to transmitted signals was applicable to transmitted signals of Lee to aid in the protection and preservation of Lee's transmitted signals and, in the reverse sense, that the frequency diversity teaching of Lee with respect to transmitted signals was applicable to transmitted signals of French to aid in the protection and preservation of French's transmitted signals. Section 103 requires us to presume that the artisan has full knowledge of the prior art in his field of endeavor and the ability to select and utilize knowledge therefrom. In re Deminski, 796 F.2d 436, 442, 230 USPQ 313, 315 (Fed. Cir. 1986).

Appellant has argued that the prior art does not teach random selection of frequencies, times or power. At page 10 of his specification, appellant discloses that random selection increases the probability of successful signal transmission. Dependent claims 7-9 include random selection. The examiner's position, stated without any basis in his answer, is that Lee selects times and frequencies "substantially at random". In his reply brief at pages 1 and 2, appellant has analyzed Lee's relevant disclosure to show that Lee does not provide random selection. The examiner's answer to the reply brief does not address appellant's analysis of Lee.

Appeal No. 95-3346  
Application 07/953,320

We find appellant's analysis of the relevant portion of Lee to be reasonable and factual. Whereas random selection has not been shown to be taught by Lee or the other prior art, and further in view of the fact that the examiner does not contend random selection would have been an obvious modification of the prior art, we hold that the examiner has not made a **prima facie** showing of obviousness of claims 7-9. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-1784 (Fed. Cir. 1992).

The Rejection under 35 U.S.C. § 103  
Claims 11-27

In setting forth the rejections of these claims, the examiner has taken the position that Nazarenko teaches transmitting control messages independently of information packets. The examiner relies on the disclosure of Nazarenko at column 26, lines 10-45, in support of his position.

In opposition to the rejection of claims 11-27, appellant argues, **inter alia**, that although the two types of messages taught by the reference and relied upon by the examiner, "control channel messages" and "working channel messages", are transmitted independently, they are not analogous to the control messages and information packets of the claims. At page 4 of the reply

brief, appellant discusses Nazarenko's disclosure at columns 10 and 16 to show that this is the case because the "control channel messages" of Nazarenko do not control the transmission of "working channel messages" between stations. In the answer to the reply brief, the above position of appellant is not addressed by the examiner.

At column 26, lines 10-45, the reference discloses that "control channel messages" and "working channel messages" are transmitted independently. However, there is no teaching in the above disclosure that the "control channel messages" control the transmission of "working channel messages". Furthermore, we agree with appellant's unrebutted analysis of Nazarenko concerning columns 10 and 16 and, accordingly, will not sustain the rejection of claims 11-27. The examiner has not established where in Nazarenko it is taught that (1) slots carry control messages independently of information packets for controlling the transmission of information packets between stations, as in independent claim 12, or (2) a radio channel assignment (control message) is transmitted to a controlled station for indicating to the controlled station the channel (slot) upon which the burst (information packet) will be transmitted, and the burst is transmitted on the indicated channel between stations, as in independent claims 18 and 24, and dependent

claim 11. In view of the above discussion, it is clear that the examiner has not made out a **prima facie** case of obviousness utilizing Nazarenko and the art with which it has been combined, and we will not sustain the rejections of claims 11-27.

Summary

In summary:

a) the decision of the examiner to reject claims 5, 6 and 10 under 35 U.S.C. § 103 as unpatentable over Lee in view of French is affirmed.

b) the decision of the examiner to reject claims 7-9 under 35 U.S.C. § 103 as unpatentable over Lee in view of French is reversed.

c) the decision of the examiner to reject claim 11 under 35 U.S.C. § 103 as unpatentable over Lee in view of French and Nazarenko is reversed.

d) the decision of the examiner to reject claims 12, 13, 15, 16, and 18-27 under 35 U.S.C. § 103 as unpatentable over Lee, McRae and Nazarenko is reversed.

e) the decision of the examiner to reject claims 14 and 17 under 35 U.S.C. § 103 as unpatentable over Lee, McRae, Nazarenko and French is reversed.

Appeal No. 95-3346  
Application 07/953,320

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

AFFIRMED-IN-PART

STANLEY M. URYNOWICZ, JR.	)
Administrative Patent Judge	)
	)
	)
	) BOARD OF PATENT
ERROL A. KRASS	) APPEALS AND
Administrative Patent Judge	) INTERFERENCES
	)
	)
	)
MICHAEL R. FLEMING	)
Administrative Patent Judge	)

Appeal No. 95-3346  
Application 07/953,320

S.E. WALTERS  
HUGHES AIRCRAFT COMPANY  
BLDG. C1, MAIL STATION A126  
P.O. BOX 80028  
LOS ANGELES, CA 90080-0028