

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

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Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ERIC G. SOENEN  
and GREGORY B. DAVIS

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Appeal No. 1997-0884  
Application 08/260,148<sup>1</sup>

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HEARD: October 4, 1999

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Before JERRY SMITH, BARRETT, and BARRY, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

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<sup>1</sup> Application for patent filed June 15, 1994, entitled "Method Of Preventing Unauthorized Reproduction Of A Transmission Code."

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This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 1-5.

We reverse.

#### BACKGROUND

The disclosed invention is in the field of remote access or remote lock systems and relates to a method for preventing unauthorized learning and retransmission of an access code as described in the Background of the Invention (specification, pages 1-2) and page 9, first paragraph, and page 21, line 25, through page 22, line 7, of the specification.

Claim 1 is reproduced below.

1. A method for preventing unauthorized learning and reproduction of an access code in a combined receiver/transmitter system comprising the steps of:

    setting a flag in a memory of an integrated circuit upon the first time the integrated circuit is placed in a learn mode while configured as a receiver; and

    checking the flag if the integrated circuit is later configured as a transmitter; and

    modifying the code if the flag is set.

The Examiner relies on the admitted prior art (APA) stating that "Texas Instruments manufactures an integrated

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circuit having both transmission and reception capability"  
(specification, page 1, lines 14-15) and the following prior  
art:

Lindmayer et al. (Lindmayer) 1992	5,159,329	October 27,
Bachhuber 1994	5,365,225	November 15,
		(April 6, 1990)

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as  
being anticipated by Lindmayer. The Examiner states (Final  
Rejection, page 2): "Lindmayer shows the claimed method of  
preventing the unauthorized learning of a code in a remote  
control system. Lindmayer shows modifying the code by erasing  
the code. See col. 3, lines 20-32."

Claims 1-5 stand rejected under 35 U.S.C. § 103 as being  
unpatentable over the APA in view of Lindmayer or Bachhuber.  
The Examiner states (Final Rejection, pages 2-3):

The admitted prior art shows that an IC can be configured  
as a receiver to receive and store access codes. The IC  
can also be configured as a transmitter to transmit  
codes. Both Lindmayer and Bachhuber teach denying access  
(erasing codes) based upon the security procedure desired  
to prevent unauthorized access to the code. Therefore,  
it would have been obvious to one of ordinary skill in  
the art at the time of the invention to have utilized the  
prevention technique taught by either Lindmayer or  
Bachhuber to have prevented an unauthorized user from  
gaining access to the stored codes in the above  
acknowledged prior art system.

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We refer to the Final Rejection (Paper No. 7) (pages referred to as "FR\_\_") and the Examiner's Answer (Paper No. 13) (pages referred to as "EA\_\_") for a statement of the Examiner's position and to the Appeal Brief (Paper No. 12) (pages referred to as "Br\_\_") for a statement of Appellants' arguments thereagainst.

OPINION

35 U.S.C. § 102(b)

"Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention."  
RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

Lindmayer discloses a remote control system, such as the central locking system of a motor vehicle, having an infrared receiver IR and control device 1 in the object to be protected V and a plurality of associated transmitters  $T_1$  to  $T_m$ . The control device stores n code words  $CW_1$  to  $CW_n$  in n memory locations, where each key code word is associated with one of the transmitters  $T_1$  to  $T_m$ . The key code word consists of a fixed basic portion,  $CWB_1$ , etc., which is object- and

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transmitter-specific and cannot be altered, and an alterable portion,  $CWA_1$ , etc., which is alterable in a known manner in accordance with a desired algorithm (col. 3, line 68, to col. 4, line 7). The receiver can be placed in a "learning phase" where the key code word of the receiver is reprogrammed by the next code word transmitted to the receiver from an arbitrary transmitter (col. 1, lines 47-57). Unauthorized use of the remote control system with a lost transmitter can be prevented by automatically invalidating, i.e, blocking or erasing, the basic code word portion (col. 3, lines 20-27).

As to the step of "setting a flag in a memory of an integrated circuit upon the first time the integrated circuit is placed in a learn mode while configured as a receiver," the closest reasoning we find is the Examiner's statement for the first time in the Examiner's Answer that "Lindmayer, col. 3, line 24 implies that an equivalent to a flag must be set since the erasing of a code is accomplished in the system dependant [sic] upon if the code has been used (received) at least once, here the flag must have been set in the system which was acting in a receiving mode" (EA5). This is a broad, but fair reading of Lindmayer. Whatever hardware or software keeps

track of the fact that the transmitter has been used at least once can be called a "flag," although the purpose of the flag is different than in the claimed invention. Appellants do not appear to challenge this reading in the Reply Brief, but rely on the argument that Lindmayer does not teach reconfiguration.

We find that the step of "checking the flag if the integrated circuit is later configured as a transmitter" is not met by Lindmayer. The Examiner interprets claim 1 to not require reconfiguration of the integrated circuit. The Examiner states that the claim phrase "if the integrated circuit is later configured as a transmitter" does "not positively recite the IC being configured as a transmitter" (EA5) and "[i]f the IC is not later configured as a transmitter, the checking step is not executed" (EA5). Thus, the Examiner apparently reads the "checking the flag if the integrated circuit is later configured as a transmitter" and the "modifying the code if the flag is set" steps out of the claim because they may not occur. This claim interpretation is erroneous. The claim language requires that the integrated circuit can be "later configured as a transmitter" after it has first been used as a receiver; thus, claim 1 requires the

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capability of reconfiguration. While it is true that reconfiguration as a transmitter may not occur, it must be capable of occurring and, when it is reconfigured, the claim language must be met. There is no disclosure or suggestion in Lindmayer that the receiver or transmitter are reconfigurable.

The Examiner states that Lindmayer implies reconfiguration because once a flag has been set indicating that a transmitter has been used at least once, and the system receives the code configured as a receiver, "[t]he code can be altered so it cannot be 'sent' to anyone attempting to read the code at latter [sic] time" (EA5). This statement is erroneous because the receiver is not capable of being configured as a transmitter to send the stored codes--it just erases the key code word so it does not work for a particular lost transmitter. There is no sending of the code word from the receiver in any sense of the word.

Since Lindmayer does not perform the step of "checking the flag if the integrated circuit is later configured as a transmitter," it does not disclose the subsequent step of "modifying the code if the flag is set." Lindmayer erases a basic code word portion corresponding to a lost transmitter,

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and arguably does so dependent on a flag which is set when a transmitter has been used at least once, but does not do so after being configured as a transmitter.

For the reasons stated above, the Examiner has failed to establish a prima facie case of anticipation. The rejection of claims 1 and 2 over Lindmayer is reversed.

35 U.S.C. § 103

The Examiner's reliance on the APA fails to address Appellants' arguments. The APA states that "Texas Instruments Incorporated manufactures an integrated circuit having both transmission and reception capability" (specification, page 1, lines 14-15). Appellants argue (Br6):

This does not disclose that the receiver receives and stores access codes and the transmitter transmits access codes.

The background of the invention additionally discloses a transmitter and receiver having different integrated circuits, and it is respectfully submitted that the different transmitters on some integrated circuits transmits codes while separate receivers on other integrated circuits receive and store access codes.

Because applicants are under a duty to disclose information material to patentability, we interpret this argument as denying that it was known to Appellants to have a

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reconfigurable integrated circuit that can receive and store access codes and transmit access codes, not just that such has not been admitted in the specification. The Examiner states (EA3): "The admitted prior art shows that an IC can be configured as a receiver to receive and store access codes. The IC can also be configured as a transmitter to transmit codes." Because Appellants deny that it was known prior art to them to have a reconfigurable integrated circuit that can receive and store access codes and transmit access codes, the Examiner errs in relying on the APA for these limitations and, thus, the obviousness rejection is flawed from the start.

The combination of the APA and Lindmayer does not render the claimed subject matter obvious. Lindmayer is discussed in connection with the anticipation rejection. Neither the APA nor Lindmayer discloses a reconfigurable integrated circuit that can receive and store access codes and transmit access codes. While Lindmayer may set a flag when a transmitter has been used at least once, the flag is not used to modify the code (claim 1) or deny transmission of the access code (claim 3) upon reconfiguration of the integrated circuit as a transmitter. Therefore, the Examiner has failed to establish

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a prima facie case of obviousness. The rejection of claims 1-5 over the APA and Lindmayer is reversed.

The combination of the APA and Bachhuber also does not render the claimed subject matter obvious. Bachhuber discloses a remote control system with separate transmitter and receiver. The Examiner does not point out what part of Bachhuber is relied on for the specific limitations of the claims, which it makes it difficult for us to review the rejection. Bachhuber discloses that there must be a way to initialize and re-initialize the transmitter-receiver system (e.g., col. 10, lines 1-7), but this does not address the steps of setting a flag or reconfiguring an integrated circuit as a receiver or transmitter. In response to Appellants' argument that Bachhuber does not suggest setting a flag, the Examiner refers to Lindmayer (EA6), which does not answer the question. We find no teaching or suggestion in Bachhuber that the receiver may be reconfigured as a transmitter or that a flag is used to indicate that the code has been learned while in a learn receive mode to prevent sending a learned code. The Examiner has failed to establish a prima facie case of

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obviousness. The rejection of claims 1-5 over the APA and Bachhuber is reversed.

Finally, we comment on the following statement by the Examiner in the Final Rejection (FR3-4):

The references (Lindmayer and Bachhuber) discuss safeguarding the code word. The discussion is based upon the ideas that 'if the transmitter has a code word...do not divulge the code when in the transmission mode.' In this scenario, it is reasonable that the system operates in an "if...then" mode. This is the same as or equivalent to the flag set and check method claimed by the applicant. These are the same when the programming of the device is accomplished.

This argument reduces the claimed invention to a general "gist" of the invention, safeguarding the code word, and suggests that any prior art that had this same idea would be equivalent in terms of patentability. This is erroneous. There may be many nonobvious ways to perform the same function or get the same result. Patentability is determined by the words of the claim and it is the claim language that must be addressed.

#### CONCLUSION

The rejection of claim 1 and 2 under 35 U.S.C. § 102(b) is reversed.

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The rejections of claims 1-5 under 35 U.S.C. § 103 are  
reversed.

REVERSED

JERRY SMITH	)	
Administrative	Patent Judge	)
	)	
	)	
	)	
	)	BOARD OF PATENT
LEE E. BARRETT	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
LANCE LEONARD BARRY	)	
Administrative Patent Judge	)	

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