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

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- (54) **MOBILE TERMINAL AND CONTROL METHOD THEREOF** 2006/0128305 A1\* 6/2006 Delalat ..... 455/41.2  
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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 54 days.

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(51) **Int. Cl.**  
**H04W 12/06** (2009.01)  
**H04L 29/06** (2006.01)

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(52) **U.S. Cl.**  
CPC ..... **H04W 12/06** (2013.01); **H04L 63/0492** (2013.01)

(57) **ABSTRACT**

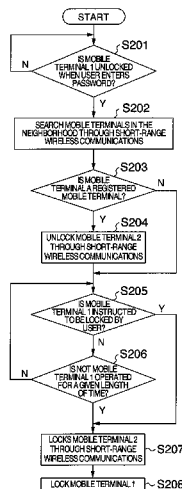
(58) **Field of Classification Search**  
CPC .. H04W 12/06; H04W 12/00; H04L 63/0492;  
H04L 9/32; H04M 1/66; H04B 7/00  
USPC ..... 455/26.1, 41.2  
See application file for complete search history.

There is provided a mobile terminal capable of being protected against unauthorized use by a third party without using a dedicated key device. A plurality of mobile terminals are previously registered mutually. When unlocked among them, one mobile terminal communicates with another mobile terminal in a communication range of short-range wireless communications, unlocks the above another mobile terminal, and when out of the communication range, locks it again.

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**20 Claims, 10 Drawing Sheets**

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FIG. 1

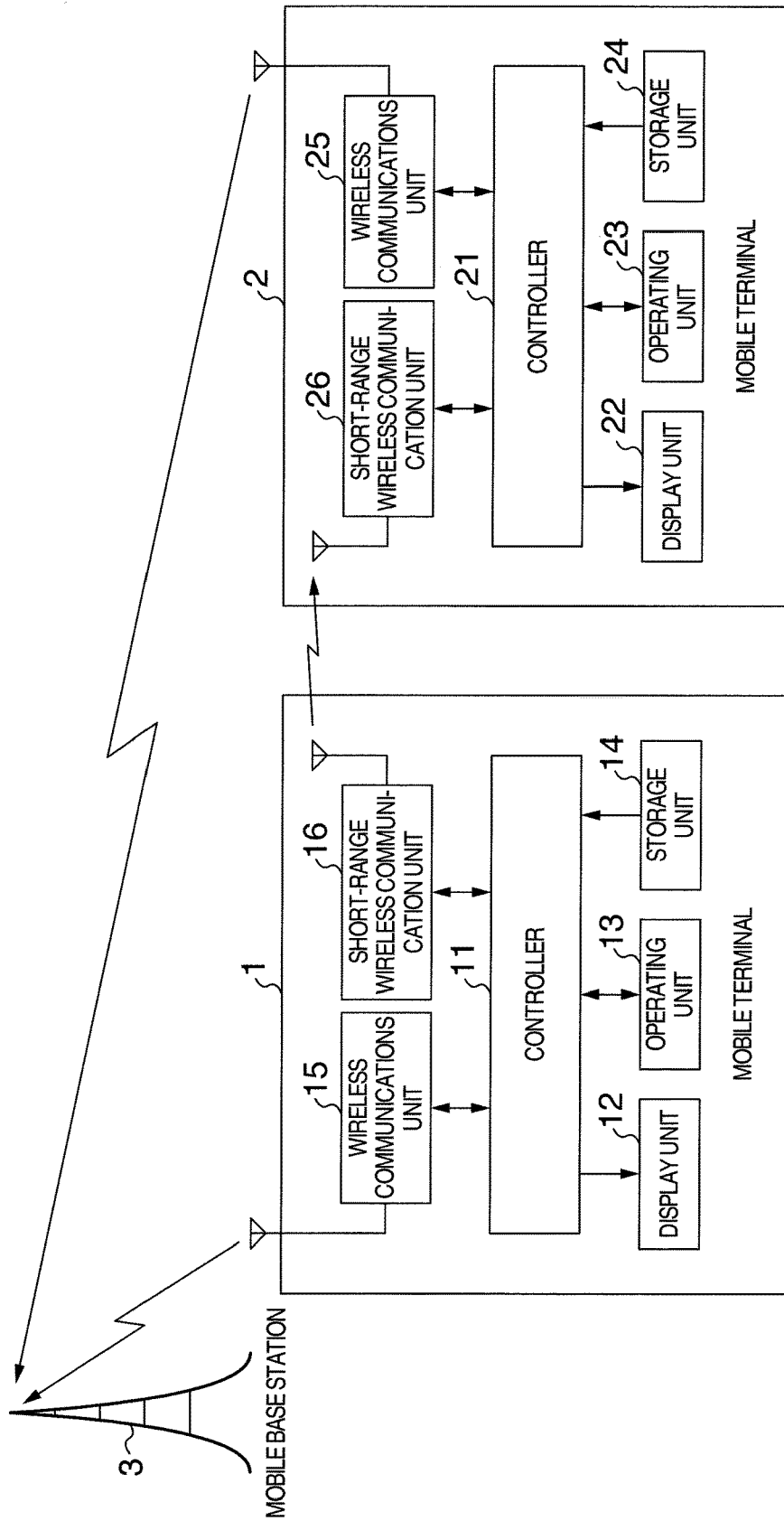


FIG. 2

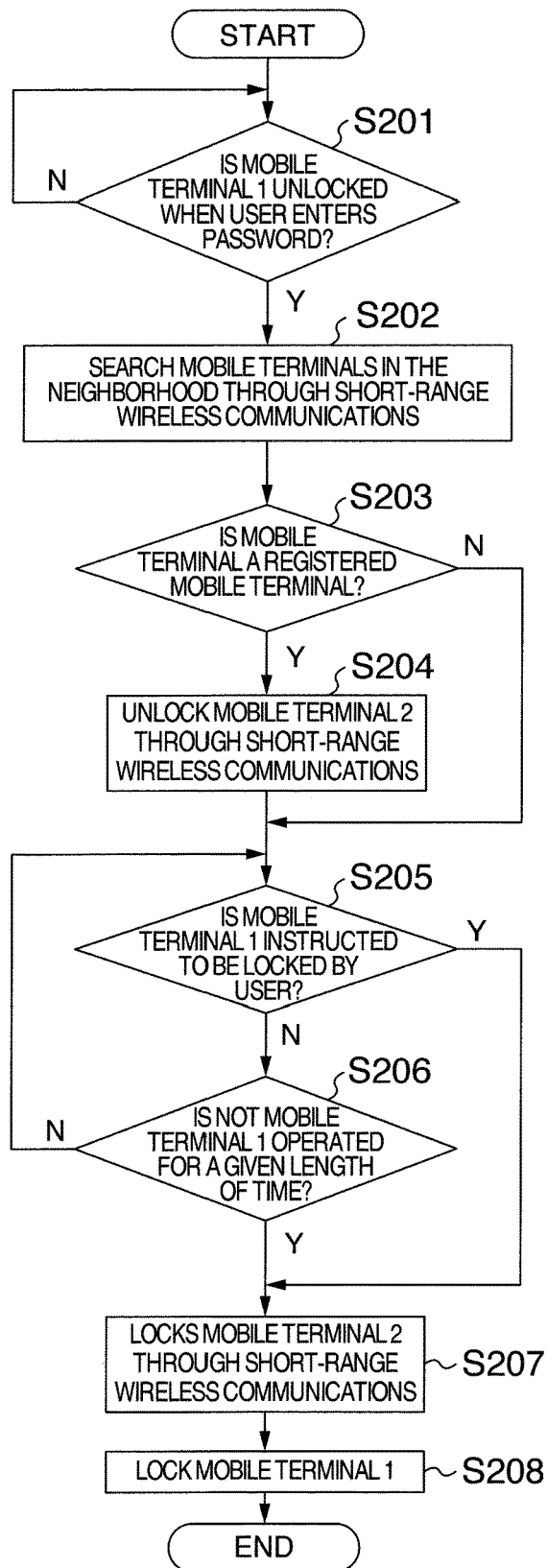
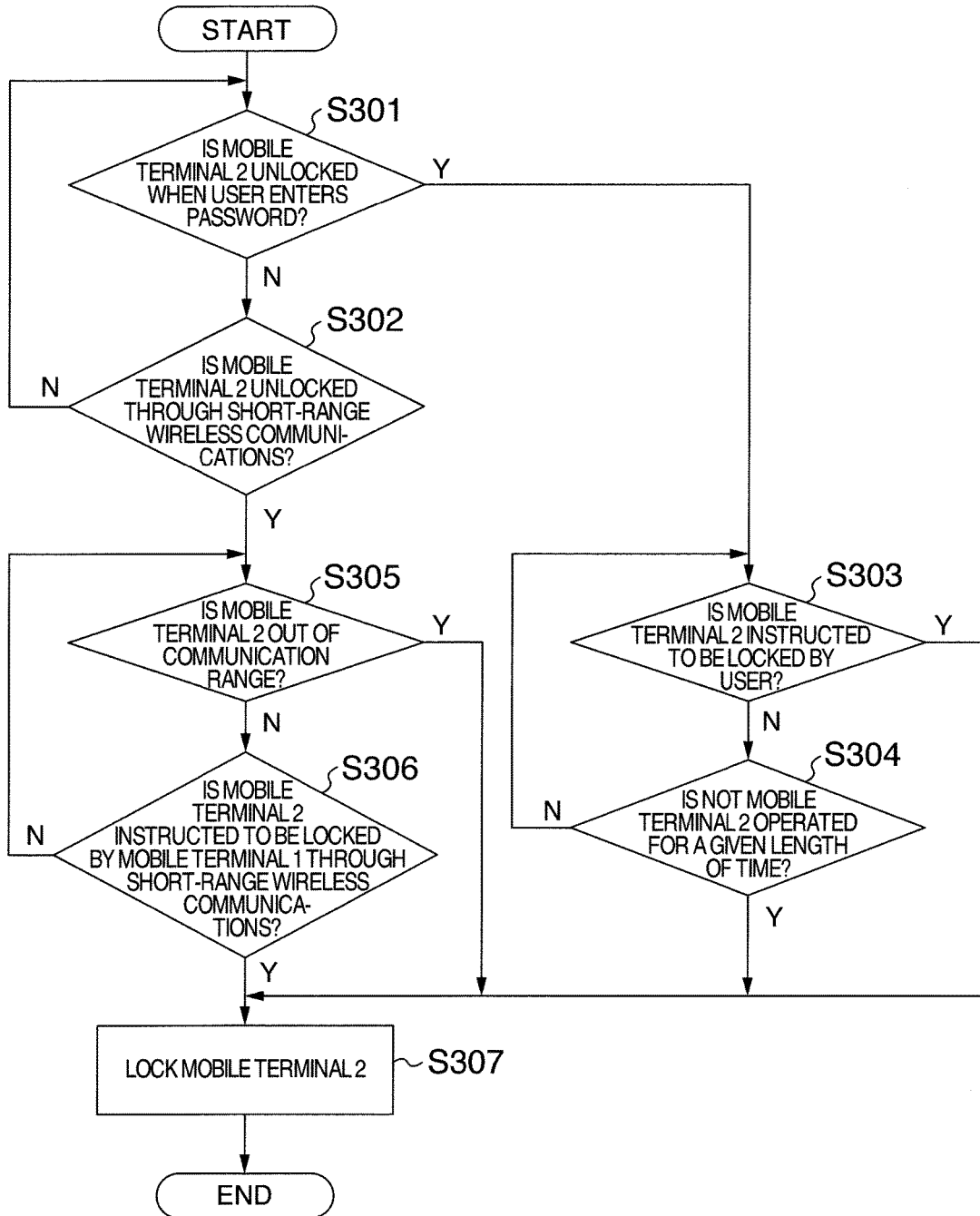


FIG. 3



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