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of law have been complied with, and it has been determined that  
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*Patent*

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*Katherine Kelly Vidal*

DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



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(12) **United States Patent**  
**Jarng**

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(54) **MOBILE TERMINAL HAVING INTEGRATED RADIO FUNCTION, AND INTEGRATED RADIO SYSTEM USING SAME**

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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 65 days.

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CPC ..... **H04H 20/57** (2013.01); **H04H 60/16** (2013.01); **H04M 1/72403** (2021.01)

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See application file for complete search history.

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(57) **ABSTRACT**

A mobile terminal having an integrated radio function according to an embodiment of the present disclosure includes an antenna configured to receive a digital radio signal, a radio connection module configured to support connection and communication with an analog radio, a display configured to play at least one of an audio signal, an image signal, and additional information, and a radio application configured to restore the audio signal, the image signal, and the additional information by decoding the digital radio signal and then play the audio signal, the image signal, and the additional information through the display, and transmit the audio signal to the analog radio when the analog radio is connected.

**5 Claims, 4 Drawing Sheets**

