

# EXHIBIT 7



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

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(54) **OUTPUT SYSTEMS OR AUDIO OUTPUT DEVICES THAT INCLUDE AN INTERFACE OPERABLE BY A USER TO INITIATE WIRELESS DISCOVERY FOR ESTABLISHING WIRELESS CONNECTIONS WITH MOBILE DEVICES**

(58) **Field of Classification Search**  
 None  
 See application file for complete search history.

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(57) **ABSTRACT**

A method for establishing a wireless connection between a mobile information apparatus (e.g., smart phone) and an output system (e.g., audio output device) are herein disclosed and enabled. The method comprises using an interface of the output system to receive an indication from a user, and initiating wireless discovery based, at least in part, on physical proximity between the mobile information apparatus and the output system, subsequent to receiving the user indication. The method additionally comprises using the mobile information apparatus to wirelessly (1) discover the output system, (2) establish a wireless communication link between the mobile information apparatus and the output system, and (3) transmit audio output data from the mobile information apparatus to the output system over the established wireless communication link. Subsequently, the output system outputs or plays at least part of the wirelessly  
 (Continued)

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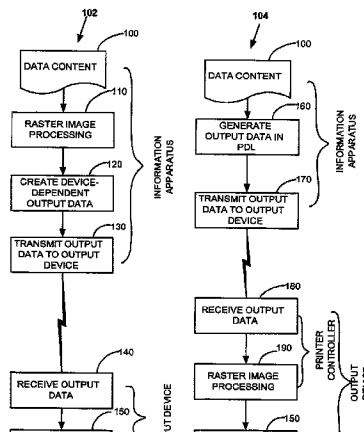
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**G06F 3/12** (2006.01)  
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US 10,387,087 B2

received audio output data from the mobile information apparatus. (56)

20 Claims, 14 Drawing Sheets

Related U.S. Application Data

which is a continuation of application No. 12/903,048, filed on Oct. 12, 2010, now Pat. No. 8,332,521, and a continuation of application No. 10/053,765, filed on Jan. 18, 2002, now Pat. No. 9,836,257, and a continuation-in-part of application No. 09/992,413, filed on Nov. 18, 2001, now Pat. No. 9,965,233, application No. 12/903,048, which is a continuation of application No. 10/016,223, filed on Nov. 1, 2001, now Pat. No. 7,941,541.

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Page 4

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