

Title (en)  
Hearing aid with volume regulator and volume regulator

Title (de)  
Hörhilfe mit Lautstärkesteller und Lautstärkesteller

Title (fr)  
Aide auditive dotée d'un régulateur de volume et régulateur de volume

Publication  
**EP 2285137 B1 20120530 (DE)**

Application  
**EP 10169590 A 20100715**

Priority  
DE 102009033448 A 20090716

Abstract (en)  
[origin: US2011013793A1] A manually-actuatable volume adjuster for a hearing aid and a hearing aid with the volume adjuster are user friendly, durable, hardly prone to errors, miniaturizable and energy-saving. The adjuster includes a manually-actuatable pushbutton switch and an infrared sensor for acquiring orientation and/or position of a manual movement carried out for the actuation. The infrared sensor is only activated while the pushbutton switch is actuated and/or during a restricted time period following that actuation. The hearing aid with the adjuster includes standard sensors as an infrared sensor and as a pushbutton switch. The infrared sensor permits construction of the adjuster without moveable mechanical actuating elements and avoids touch surfaces or contact surfaces susceptible to wear-and-tear. The increased energy consumption of an infrared sensor is counteracted by the functional combination with the pushbutton switch. The infrared sensor is only active when the pushbutton switch is actuated and is otherwise in idle mode.

IPC 8 full level  
**H04R 25/00** (2006.01)

CPC (source: EP US)  
**H04R 25/50** (2013.01 - EP US); **H04R 25/558** (2013.01 - EP US); **H04R 25/603** (2019.04 - EP US); **H04R 25/607** (2019.04 - EP US);  
**H04R 2225/61** (2013.01 - EP US); **H04R 2460/03** (2013.01 - EP US)

Cited by  
DE102013210200A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**DE 102009033448 B3 20100930**; CN 101959113 A 20110126; DK 2285137 T3 20120910; EP 2285137 A1 20110216; EP 2285137 B1 20120530;  
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