

Title (en)  
Fitting structure for built in type apparatus

Title (de)  
Befestigungseinrichtung für ein Einbaugerät

Title (fr)  
Système de fixation pour appareil encastré

Publication  
**EP 1731830 A1 20061213 (EN)**

Application  
**EP 06011776 A 20060607**

Priority  
• JP 2005168072 A 20050608  
• JP 2006158477 A 20060607

Abstract (en)  
A fitting structure for a built in type apparatus housed in a fitting hole (Y) formed on a ceiling or a wall, comprising a fitting frame (1) to which a body (12) is attached. The fitting frame (11) comprises a frame body (12) adapted to be inserted into the fitting hole and plural support portions (13) having receiving pawls (13d), the frame body (12) further having a brim which is extended outward from the fitting hole, and the support portions being attached to fitting means. Each of fitting means comprises a blade spring (21), an operation piece (22) having an opening (22b), and a toggle link (23) pivotally connected to the operation piece (22) at one end, and having an engaging end (22c) at the other end, in which the blade spring (21) is pivotally connected to a supporting shaft (13b) provided in the support portion (13) at one end (21a) is pivotally connected to the operation piece at the other end (21b), in a manner that the blade spring (21) passes through the opening (22b) of the operation piece. The engaging end (23b) of the toggle link (23) is engaged with the receiving pawl (13d) of the support portion (13) when pressing the one end (22f) of the operation piece on the inner surface of the ceiling or the wall to elastically deform the blade spring (21), after the frame body (12) is inserted into the fitting hole (Y), thereby lifting up the fitting frame (1) by the resilience force of the blade spring (21).

IPC 8 full level  
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CPC (source: EP)  
**F21V 21/04** (2013.01); **F21V 21/145** (2013.01); **F21V 21/30** (2013.01)

Citation (applicant)  
• JP 2004362989 A 20041224 - ASAHI MATSUSHITA ELEC WORKS  
• JP H07211122 A 19950811 - NAKANO DENKI KK

Citation (search report)  
• [A] FR 1579462 A 19690829  
• [A] FR 1304849 A 19620928  
• [A] US 5944412 A 19990831 - JANOS GEORGE L [US], et al  
• [A] EP 0140058 A1 19850508 - SIEMENS AG [DE]

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