

Title (en)  
Multi-operational input device

Title (de)  
Multifunktionale Eingabevorrichtung

Title (fr)  
Dispositif d'entrée multidirectionnel

Publication  
**EP 1708220 A1 20061004 (EN)**

Application  
**EP 06004629 A 20060307**

Priority  
JP 2005103039 A 20050331

Abstract (en)  
A multi-operational input device includes a press a press knob (29) which is supported on the top surface of an upper knob so as to be press-operated; a circuit board (35) which is disposed on the rear side of the press knob; a push switch (37) which is mounted on the surface of the circuit board; a rotation ring (27) which is supported between the upper knob and a lower knob so as to be rotatably operated; a code plate (33) which is rotated in conjunction with the rotation of the rotation ring; photo interrupters which are mounted on the rear side of the circuit board. The push switch is operated by pressing the press knob and the code plate is rotated in conjunction with the rotating or the rotation ring, so as to operate the photo interrupters mounted on the rear side of the circuit board. At this time, as the rotation ring is continuously disposed over a range from the surface of the circuit board to the rear side thereof, a rotating force of the rotation ring is transmitted to the code plate disposed on the rear side of the circuit board

IPC 8 full level  
**H01H 27/06** (2006.01); **G05G 9/047** (2006.01)

CPC (source: EP)  
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Citation (applicant)  
JP 2004087307 A 20040318 - ALPS ELECTRIC CO LTD

Citation (search report)  
• [YDA] EP 1394830 A2 20040303 - ALPS ELECTRIC CO LTD [JP]  
• [Y] US 6713896 B1 20040330 - BURTSCHER HANS [AU], et al  
• [A] FR 2785084 A1 20000428 - SC2N SA [FR]  
• [A] US 2002003081 A1 20020110 - KAWASE TATSUAKI [JP]

Cited by  
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Designated contracting state (EPC)  
DE FR GB

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