

Title (en)  
Input device, and electronic apparatus using same

Title (de)  
Eingabevorrichtung und elektronisches Gerät damit

Title (fr)  
Dispositif d'entrée et appareil électronique l'utilisant

Publication  
**EP 2031620 A8 20090617 (EN)**

Application  
**EP 08162947 A 20080826**

Priority  
JP 2007226208 A 20070831

Abstract (en)  
[origin: EP2031620A2] Provided are an input device capable of a variety of operations with a simple configuration, and an electronic apparatus using the same. A rotary operation portion 2 includes ring magnets 4 securely attached at opposite ends of a roller 3, each ring magnet 4 being magnetized with the Sand N-poles alternating at a predetermined angular pitch, and magnetic sensing elements 13 and stationary magnets 7 disposed so as to face their respective ring magnets 4. The rotary operation portion 2 is covered by an operation plate 16 having formed at its center a roller insertion hole 16a for projecting a part of the outer circumferential surface of the roller 3. The rotation of the roller 3 is magnetically sensed, and switches 9 and 11 are provided so as to be turned "ON"/"OFF" in accordance with operations of pressing the roller 3 and rocking the operation plate 16 in the "front", "back", "left", and "right" directions.

IPC 8 full level  
**H01H 25/00** (2006.01); **H01H 19/14** (2006.01); **H01H 25/04** (2006.01); **H01H 36/00** (2006.01)

CPC (source: EP US)  
**G06F 3/0338** (2013.01 - EP US); **G06F 3/0362** (2013.01 - EP US); **H01H 25/008** (2013.01 - EP US); **H01H 25/041** (2013.01 - EP US); **H01H 36/006** (2013.01 - EP US); **H01H 19/11** (2013.01 - EP US); **H01H 2003/506** (2013.01 - EP US); **H01H 2019/146** (2013.01 - EP US)

Cited by  
FR2974661A1; WO2012146503A1; US9331688B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 2031620 A2 20090304**; **EP 2031620 A3 20110216**; **EP 2031620 A8 20090617**; CN 101377723 A 20090304; CN 101377723 B 20101208; JP 2009059599 A 20090319; JP 4995008 B2 20120808; US 2009073145 A1 20090319

DOCDB simple family (application)  
**EP 08162947 A 20080826**; CN 200810211148 A 20080828; JP 2007226208 A 20070831; US 20150808 A 20080829