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(11) **EP 1 014 405 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**05.12.2001 Bulletin 2001/49**

(51) Int Cl.7: **H01H 13/20**

(43) Date of publication A2:  
**28.06.2000 Bulletin 2000/26**

(21) Application number: **99125555.5**

(22) Date of filing: **21.12.1999**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE**  
Designated Extension States:  
**AL LT LV MK RO SI**

(30) Priority: **21.12.1998 JP 36263798**

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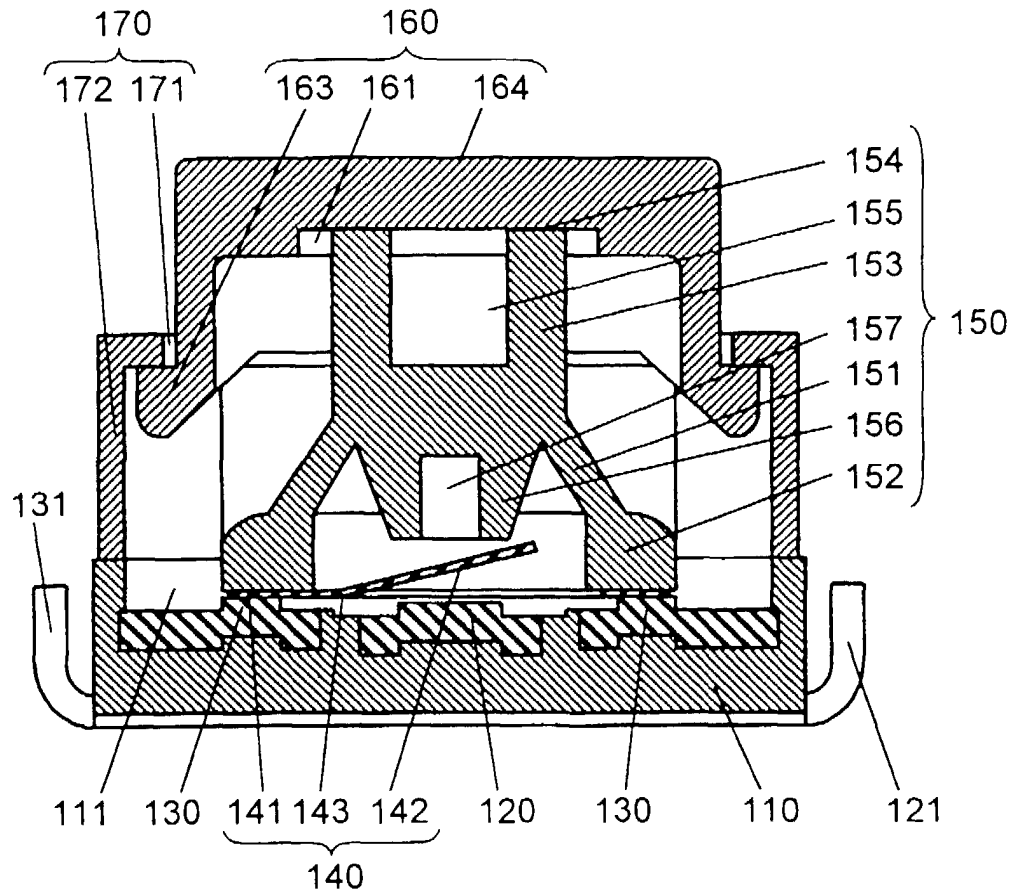
(54) **Push switch**

(57) A push switch of the present invention, which suits for small switches used for various apparatuses, comprises (a) a switch substrate (110) having outer fixed contact units (130) and a central fixed contact unit (120), both of which are fixed to the substrate (110) and have contact portions exposed from upper side of the substrate (110), also have connecting terminals (121, 131) extended therefrom, (b) a movable contact unit (140) which is formed with an elastic thin metal plate, and has an outer portion (141) placed on the outer fixed contact units (130), also has a tongue shaped portion (142) which faces toward the central fixed contact unit (120) forming a predetermined insulation gap between the portion (142) and the fixed contact unit (120), (c) an elastic unit (150) which is formed with an elastic material, and has a conical portion (151) having an opening at the lower side thereof, an upward protrusion (153) and a downward protrusion (156) which protrudes downward from the upper end of the opening, and, presses the outer portion (141) with the lower end portion (152) of the conical portion (151), (d) an operation unit (160) which is disposed on the upward protrusion

(153) of the elastic unit (150) in such a manner as to be movable up and down and has a protrusion (163) at the lower end periphery thereof for preventing the slip off of the operation unit (160), (e) a cover (171) which is fixed to the periphery of the switch substrate (110), and holds the operation unit (160) with the surrounding wall (172) thereof in such a manner as to be movable up and down without the upward slip off of the operation unit (160), also has a hole (171), through which the operation unit (160) protrudes, at the upper central portion thereof, wherein, when an upper end portion (164) of the operation unit (160) is pressed, the portion (151) elastically deforms first, whereby the protrusion (156) presses the portion (142), whereby the portion (142) touches the fixed contact unit (120), next at least one of the protrusion (153) or the protrusion (156) deforms, whereby the protrusion (163) touches the substrate (110). The above structure realizes a push switch in which component parts are handled without difficulty, and the assembling productivity is superior, also the operation stroke is long.

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FIG. 1





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# EUROPEAN SEARCH REPORT

Application Number  
EP 99 12 5555

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The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>15 October 2001</b>	Examiner <b>Desmet, W</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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