



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
05.02.2003 Bulletin 2003/06

(51) Int Cl.7: **H01R 24/06**

(43) Date of publication A2:
12.12.2001 Bulletin 2001/50

(21) Application number: **01202150.7**

(22) Date of filing: **06.06.2001**

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

(72) Inventor: **Nobuyuki, Mano**
Shinagawa-ku, Tokyo (JP)

(74) Representative: **Quintelier, Claude et al**
Gevers & Vander Haeghen,
Hollidaystraat 5
1831 Diegem (BE)

(30) Priority: **06.06.2000 JP 2000169259**

(71) Applicant: **SMK CO., LTD.**
Tokyo 142 (JP)

(54) **Pivotal power supply plug device**

(57) A compact rotary power supply plug corresponding to 200 V of the European and U. S. standards and formed with reduced number of parts into a simple structure can be provided. A plug supporting piece (10) is pivotably provided on one end of an insertion plug storing recess (3) provided at a surface of a housing (1). Insertion plugs (11, 11) made of a metal conductive material are supported at the plug supporting piece (10) and projected therefrom. A contact (19) in electrical connection with each insertion plug (11) is provided at the bottom surface (10b) of the plug supporting piece (10). Each contact (19) is contacted to a connection terminal (20) in the housing (1) when the plug supporting piece (10) is upraised together with the insertion plugs (11, 11). The insertion plugs (11, 11) are pushed down together with the plug supporting piece (10) and stored into the recess (3). The housing (1) includes a housing main body (1a) and a housing lid body (1b) fitted with one another, half bodies (12b, 12b) of bearings (12, 12) provided on both sides of the recess (3) for rotatably supporting the shaft (10a, 10a) of the plug supporting piece (10), projection pieces (13, 13) for the bearings on both sides of the main body and the other half bodies (12a, 12a) of the bearings provided at the tip ends of the projection pieces (13, 13). The plug storing recess (3) is provided at an outer surface of the lid body (1b). The housing main body (1a) is fitted with the lid body (1b) for joining both half bodies of the bearings to form the bearings (12, 12).

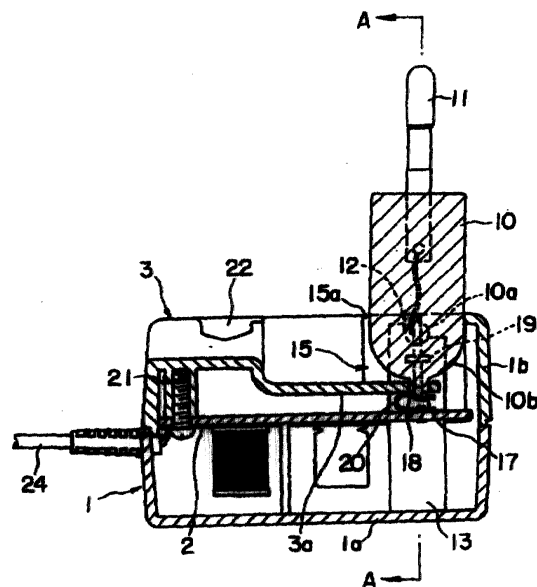


Fig. 1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 20 2150

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 6 062 880 A (SKUZA VOYTECK T) 16 May 2000 (2000-05-16)	1,4,5	H01R24/06
Y	* abstract; figures 1-3,9-11 * * page 7, line 1 - page 9, line 30 *	2,3	
Y	WO 97 16873 A (CIMBAL JOCHEN ;BRAUN AG (DE); DUERR HELMUT (DE); SCHAMBERG THOMAS) 9 May 1997 (1997-05-09) * abstract; figures 1-5 * * column 2, line 60 - column 6, line 14 *	2	
Y	US 5 829 993 A (WU MICHAEL) 3 November 1998 (1998-11-03) * abstract; figures 1,2,4 * * column 2, line 34 - column 8, line 22 *	3	
A	US 4 997 381 A (OH TAE J) 5 March 1991 (1991-03-05) * abstract; figures 1,2 * * column 2, line 28 - column 4, line 7 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H01R
Place of search		Date of completion of the search	Examiner
THE HAGUE		16 December 2002	Serrano Funcia, J
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 (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 20 2150

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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-12-2002

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6062880	A	16-05-2000	AU	1366599 A	24-05-1999
			WO	9923728 A1	14-05-1999
WO 9716873	A	09-05-1997	DE	19540304 A1	30-04-1997
			AT	178166 T	15-04-1999
			CN	1200202 A	25-11-1998
			DE	59601522 D1	29-04-1999
			WO	9716873 A1	09-05-1997
			EP	0857363 A1	12-08-1998
			HK	1010287 A1	24-03-2000
			JP	11515138 T	21-12-1999
			US	6190184 B1	20-02-2001
US 5829993	A	03-11-1998	DE	29622368 U1	13-03-1997
			US	5906509 A	25-05-1999
US 4997381	A	05-03-1991	NONE		