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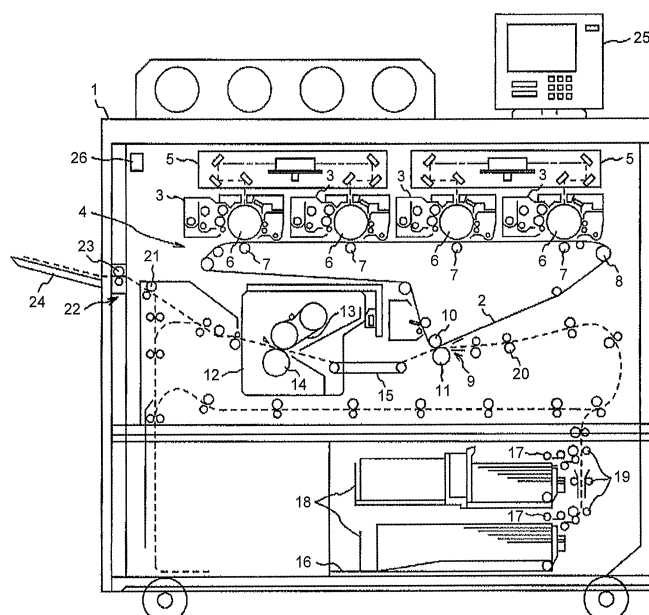
(30) Priority: **06.09.2011 JP 2011194131**

(54) **Power supplying unit and image forming apparatus**

(57) A power supplying unit (27; 28) is electrically connected to and disconnected from an apparatus-side connector (50) provided to an electronic apparatus (1). The power supplying unit (27; 28) includes a power source primary-side part (33, 34; 43, 44); a unit-side connector (35, 36; 45, 46) configured to be electrically connected to the power source primary-side part (33, 34; 43, 44) and electrically connected to and disconnected from an apparatus-side connector (50, 51; 52, 53); and a unit-side plug (30, 38; 40) configured to be electrically connected to the power source primary-side part (33, 34; 43, 44) and electrically connected to and disconnected from an outlet of an external power source.

connected to the power source primary-side part (33, 34; 43, 44) and electrically connected to and disconnected from the apparatus-side connector (50, 51; 52, 53); and a unit-side plug (30, 38; 40) configured to be electrically connected to the power source primary-side part (33, 34; 43, 44) and electrically connected to and disconnected from an outlet of an external power source.

FIG.1





EUROPEAN SEARCH REPORT

Application Number
EP 12 18 2899

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2003/076440 A1 (TERANE AKIO [JP]) 24 April 2003 (2003-04-24) * abstract; figures *	1,6	INV. G06F1/26 H01R31/06 H02M7/00 G03G15/00
X	US 2003/201676 A1 (SU CARL [US]) 30 October 2003 (2003-10-30) * figures *	1,6	
X	US 4 259 705 A (STIFTER FRANCIS J) 31 March 1981 (1981-03-31) * columns 2,3; figures *	1	
Y		2,4	
X	US 5 821 636 A (BAKER KENNETH R [US] ET AL) 13 October 1998 (1998-10-13) * column 2; figures *	1,3	
Y		2,4	
			TECHNICAL FIELDS SEARCHED (IPC)
			G03G H01R H02M
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 19 March 2013	Examiner Lipp, Günter
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	

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EPO FORM 1503 03.02 (P04C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☒ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

1-4, 6

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 12 18 2899

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1, 6

power supplying unit

2. claim: 2

a current threshold controlled breaker and a noise filter

3. claims: 3, 4

number of plugs and electrical paths

4. claim: 5

connector terminals arranged in different positions and
having different shapes from each other

5. claim: 7

alternating-current control board comprising means
configured detect an abnormality

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

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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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19-03-2013

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