

(12) United States Patent Gesuita et al.

(10) Patent No.:

US 6,830,476 B2

(45) Date of Patent:

Dec. 14, 2004

(54)	ELECTRIC POWER AND				
	COMMUNICATIONS SIGNAL				
	DISTRIBUTION UNIT, PARTICULARLY FOR				
	HEADS OF COMBINATION WEIGHERS				

- (75) Inventors: Enzo Gesuita, Selvazzano Dentro (IT); Francesco Gusson, Vigonza (IT)
- (73) Assignee: Martini S.r.l., Galliera Veneta (IT)
- Subject to any disclaimer, the term of this (*) Notice: patent is extended or adjusted under 35 U.S.C. 154(b) by 18 days.
- (21) Appl. No.: 10/600,427
- (22) Filed: Jun. 23, 2003
- Prior Publication Data (65)US 2004/0058564 A1 Mar. 25, 2004

Foreign Application Priority Data (30)

Sep.	20, 2002	(IT)		PD2002A0239
(51)	Int. Cl.7		H01R 12/24	; G01G 13/00

- (58) Field of Search 439/498, 492, 439/493; 177/25.18

References Cited (56)

U.S. PATENT DOCUMENTS

5,981,881 A * 11/1999 Kawanishi et al. 177/25.18

6,046,411	A	*	4/2000	Kawanishi et al 177/25.13
6,373,001	B1	*	4/2002	Kono et al 177/25.18
6,408,223	B1	*	6/2002	Skyum et al 700/213
6,462,287	B1	*	10/2002	Mikesell 177/25.18
6,545,230	B2	*	4/2003	Tamai et al 177/25.18
6,566,613	B1	*	5/2003	Gesuita et al 177/25.18
6,720,503	B2	*	4/2004	Schmidhuber 177/25.18

^{*} cited by examiner

Primary Examiner-Gary Paumen (74) Attorney, Agent, or Firm-Guido Modiano; Albert Josif; Daniel O'Byrne

ABSTRACT

A distribution unit for electric power and communications signals, particularly adapted to be used in combination weighers in order to supply power to individual heads of the weigher, the distribution unit is composed of a flexible printed circuit, which is manufactured flat and is provided with a plurality of multipole connectors for supplying power to the heads of a combination weigher and connect them to the communications network; the printed circuit is mounted on a substantially cylindrical structure, so that the multipole connectors are each arranged along a generatrix of the cylinder and the connectors of the weighing heads can be coupled to them radially.

11 Claims, 4 Drawing Sheets

