



HU000024096T2

(19) **HU**(11) Lajstromszám: **E 024 096**(13) **T2****MAGYARORSZÁG**  
Szellemi Tulajdon Nemzeti Hivatala**EURÓPAI SZABADALOM**  
**SZÖVEGÉNEK FORDÍTÁSA**(21) Magyar ügyszám: **E 10 712336**  
(22) A bejelentés napja: **2010. 03. 26.**(51) Int. Cl.: **H01R 9/24** (2006.01)  
**H01R 135/06** (2006.01)(96) Az európai bejelentés bejelentési száma:  
**EP 20100712336**(86) A nemzetközi (PCT) bejelentési szám:  
**PCT/EP 10/001916**(97) Az európai bejelentés közzétételi adatai:  
**EP 2441128 A1** **2010. 12. 16.**(87) A nemzetközi közzétételi szám:  
**WO 10142359**(97) Az európai szabadalom megadásának meghirdetési adatai:  
**EP 2441128 B1** **2014. 03. 12.**(30) Elsőbbségi adatok:  
**102009024330** **2009. 06. 09.** **DE**(73) Jogosult(ak):  
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**Csatlakozó dugaszáv**

Az európai szabadalom ellen, megadásának az Európai Szabadalmi Közlönyben való meghirdetésétől számított kilenc hónapon belül, felszólalást lehet benyújtani az Európai Szabadalmi Hivatalnál. (Európai Szabadalmi Egyezmény 99. cikk(1))

A fordítást a szabadalmas az 1995. évi XXXIII. törvény 84/H. §-a szerint nyújtotta be. A fordítás tartalmi helyességét a Szellemi Tulajdon Nemzeti Hivatala nem vizsgálta.

Terminal strip

The invention relates to a terminal strip for telecommunications and data technology.

5 Terminal strips for telecommunications and data technology are known in various  
embodiments, which have a housing and wire connection contacts. The housing is  
preferably made from plastic. The wire connection contacts are in this case usually in  
the form of insulation displacement contacts or in the form of wire-wrap contacts. In  
10 this case, first wire connection contacts are accessible from the upper side of the  
housing and are used, for example, for connecting incoming wires. Second wire  
connection contacts can likewise be accessible from the upper side or the lower side  
and are used for connecting outgoing wires. Furthermore, terminal strips with electrical  
interfaces are known which are in the form of isolating contacts or connection  
15 contacts, for example. Functional elements such as overvoltage protection elements or  
splitters can be connected between the first and second wire connection contacts  
(isolating contact) or connected thereto (for example connection contact for two-pole  
surge arrester) via these interfaces. Owing to the different design of the interfaces, the  
housing parts are not interchangeable, which makes manufacture of different terminal  
strips more difficult.

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EP 0 743 710 A1 discloses a terminal strip according to the preamble of Claim 1.

DE 10 2004 017605 B3 discloses a plug-type connector for printed circuit boards.

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DE 10 2007 026111 A1 discloses a two-part housing.

DE 102 36 114 A1 discloses means for fastening a housing part on a board.

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The invention is based on the technical problem of providing a terminal strip for  
telecommunications and data technology which can be matched in a less expensive  
manner to various electrical interfaces.

The solution to the technical problem results from the subject matter having the

features of Claim 1. Further advantageous configurations of the invention are given in the dependent claims.

5 In this regard, the terminal strip for telecommunications and data technology comprises a housing and wire connection contacts, first wire connection contacts being accessible from the upper side of the housing and second wire connection contacts being accessible from the upper side or from the lower side of the housing, and electrical interfaces being accessible from the upper side of the housing, which interfaces are connected to the first and/or second wire connection contacts, the  
10 housing having a housing upper part, a housing lower part and a housing central part, the housing central part having receptacles, in which the first and second wire connection contacts and electrical interfaces are partially guided and mechanically supported. This makes it possible to match a terminal strip in a simple manner to different electrical interfaces merely by matching the housing central part, but the  
15 housing upper part and the housing lower part thereof do not need to be altered. This correspondingly reduces the manufacturing costs. The receptacles are formed by chambers which are formed between intermediate walls between a front and rear side wall.

20 In one embodiment, the housing central part is latched with the housing upper part and/or with the housing lower part.

In a further preferred embodiment, the electrical interfaces are in the form of connection contacts or in the form of isolating contacts.

25 In a further preferred embodiment, lugs, by means of which the terminal strip can be latched on a front panel and/or on an adapter, are arranged on the housing lower part. The terminal strip or a plurality of terminal strips can then be fastened on round rods or mounting troughs by means of the adapter.

30 The invention will be explained in more detail below with reference to a preferred exemplary embodiment. In the figures:

- figure 1 shows an exploded illustration of a terminal strip with electrical interfaces in the form of isolating contacts.
- figure 2 shows a perspective illustration of an assembled terminal strip,
- 5 figure 3a shows a sectional illustration through a terminal strip with connection contacts as electrical interfaces,
- figure 3b shows a sectional illustration through a terminal strip with isolating contacts as electrical interfaces,
- 10 figure 4 shows a perspective illustration of an adapter for accommodating two terminal strips, and
- 15 figure 5 shows a perspective illustration of an adapter equipped with two terminal strips.

The terminal strip 1 comprises a housing upper part 10, a housing lower part 20 and a housing central part 30. Furthermore, the terminal strip 1 has first wire connection contacts 50, which are accessible from the upper side 19 of the housing, and second wire connection contacts 60, which are accessible from the lower side 29 of the housing. The first and second wire connection contacts 50, 60 are in this case in the form of insulation displacement contacts. In each case one contact limb 71, 72 is arranged at each first and second wire connection contact 50, 60. In each case one contact limb 71 of a first wire connection contact 50 and one contact limb 72 of a second wire connection contact 60 together form an isolating contact 70 (see figure 3b). The isolating contact 70 is in this case accessible from the upper side 19 of the housing. For this purpose, the housing upper part 10 has openings 11 above the isolating contacts 70. The housing upper part 10 has clamping webs 12, between which the wire connection contacts 50 are positioned. Furthermore, a front side wall 13 has three latching openings 16. Correspondingly, a rear side wall 14 also has such latching openings. The rear side wall 14 is raised up to the height of the front side wall 13, with the result that a channel 18, which is in the form of a U in cross section and on whose

base the openings 11 for the isolating contacts 70 are positioned, is formed between the clamping webs 12 and the side wall 14 (see figure 3b).

5 The housing lower part 20, in a similar way to the housing upper part 10, has clamping ribs 22 and latching openings 26, but a rear side wall 24 is not raised up to the height of a front side wall 23. In each case two latching lugs 27 with a latching web 28 are arranged on the front and rear side walls 23, 24.

10 The housing central part 30 has, centrally, a peripheral rim 31, which is broader at a rear end side 32 of the housing central part 30 and has a slot 35, through which a grounding contact can be passed, for example. The slot 35 in this case corresponds to a parallelepipedal aperture 17 in the housing upper part 10. Furthermore, the housing central part 30 has six latching tabs 36 on a front side wall 33, three latching tabs 36 being arranged above the rim 31 and three latching tabs being arranged below the rim, 15 with the lower latching tabs 36 being covered by the rim 31 in the illustration. Correspondingly, six latching tabs 36 are arranged on the rear side wall 34. The latching tabs 36 which are arranged above the rim 31 then, in the assembled state, latch into the latching openings 16 of the housing upper part 10, and the latching tabs 36 which are arranged below the rim 31 latch into the latching openings 26 of the housing 20 lower part 20. Furthermore, the housing central part 30 has intermediate walls 37, which extend between the front and rear side walls 33, 34 and in the process form chambers 38, in which the wire connection contacts 50, 60, but also the electrical interfaces in the form of the isolating contacts 70 are partially guided. In this case, the formation of the chambers 38 and the intermediate walls 37 is dependent on the type of 25 electrical interfaces.

The terminal strip 1 is matched to different electrical interfaces in this case exclusively by virtue of a matched housing central part 30', whereas the housing upper part 10 and the housing lower part 20 remain unchanged. This becomes apparent on comparison of 30 the illustrations in figures 3a and 3b, with the electrical interface being in the form of a connection contact 74, which is integrally connected to the two wire connection contacts 50, 60, in figure 3a. The housing upper part 10 and the housing lower part 20 are of identical design, but the housing upper part 10 and the housing lower part 20 are

positioned differently with respect to one another owing to the matched housing central part 30'. It should be noted here that the sections are positioned in such a way that the latching tabs 36 cannot be seen in figures 3a and 3b.

5 The terminal strip 1 can latch behind a front panel by means of the latching lugs 27 with the latching web 28, the latching web 28 preventing the terminal strip from becoming unlatched if pressure is applied to said terminal strip 1.

10 Figure 4 illustrates an adapter 80 which serves the purpose of fastening the terminal strips 1 on round rods. For this purpose, the adapter 80 is formed with two snap-action elements 81, which have radial notches. Furthermore, the adapter 80 has latching openings 82, into which the rearward latching lugs 27 of the terminal strip 1 latch. Two mounts 84 which are in the form of a U in cross section extend from a front side wall 83 in the direction of the rear side wall 85, the protruding part of the housing upper  
15 part 10 and the housing central part 30 resting on said mounts.

Finally, figure 5 illustrates the adapter 80 equipped with two terminal strips 1.

List of reference symbols

	1	Terminal strip
	10	Housing upper part
5	11	Openings
	12	Clamping webs
	13	Front side wall
	14	Rear side wall
	16	Latching openings
10	17	Parallelepipedal aperture
	18	Channel
	19	Upper side
	20	Housing lower part
	22	Clamping webs
15	23	Front side wall
	24	Rear side wall
	26	Latching openings
	27	Latching lugs
	28	Latching web
20	29	Lower side
	30, 30'	Housing central part
	31	Peripheral rim
	32	Rear end side
	33	Front side wall
25	34	Rear side wall
	35	Slot
	36	Latching tabs
	37	Intermediate walls
	38	Chamber
30	50	Wire connection contacts
	60	Wire connection contacts
	70	Isolating contact

71	Contact limb
72	Contact limb
74	Connection contact
80	Adapter
5 81	Snap-action elements
82	Latching openings
83	Front side wall
84	U-shaped mounts
85	Rear side wall

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Csatlakozó dugaszszáv

(EP2441128)

### Szabadalmi igénypontok

1. Csatlakozó dugaszszáv (1) távközlési- és adatátviteli célra, amely tartalmaz egy házat és vezetékhez csatlakozó érintkezőket (50, 60), ahol az első vezetékhez csatlakozó érintkezők (50) a ház felső oldala (19) felől, és a második vezetékhez csatlakozó érintkezők (60) ház alsó oldala (29) felől hozzáférhetők, továbbá a ház felső oldala (19) felől az első és második vezetékhez csatlakozó érintkezőkkel (50, 60) összekötött villamos csatlakozó felületek (70, 74) hozzáférhetők, ahol a háznak felső házrésze (10), alsó házrésze (20) és középső házrésze (30, 30') van, azzal jellemezve, hogy a középső házrészen (30, 30') befogadóhelyek vannak, amelyekben az első és második vezetékhez csatlakozó érintkezők (50, 60) és a villamos csatlakozó felületek (70, 74) részben vezetve és mechanikusan támasztva vannak, ahol a befogadóhelyeket kamrák (38) képezik, amelyek a középső házrész (30, 30') közbenső falai (37), elülső oldalfala (33) és hátsó oldalfala (34) között található.
2. Az 1. igénypont szerinti csatlakozó dugaszszáv, azzal jellemezve, hogy a középső házrész (30, 30') a felső házrésszel (10) és/vagy az alsó házrésszel (20) össze van pattintva.
3. Az 1. vagy 2. igénypont szerinti csatlakozó dugaszszáv, azzal jellemezve, hogy a villamos csatlakozó felületeket csatlakozó érintkezők (74) vagy elválasztó érintkezők (70) képezik.
4. Az előző igénypontok bármelyike szerinti csatlakozó dugaszszáv, azzal jellemezve, hogy az alsó házrészen (20) fülek (27) találhatóak, amelyekkel a csatlakozó dugaszszáv (1) egy előlapon és/vagy egy adapteren (80) rögzíthető.

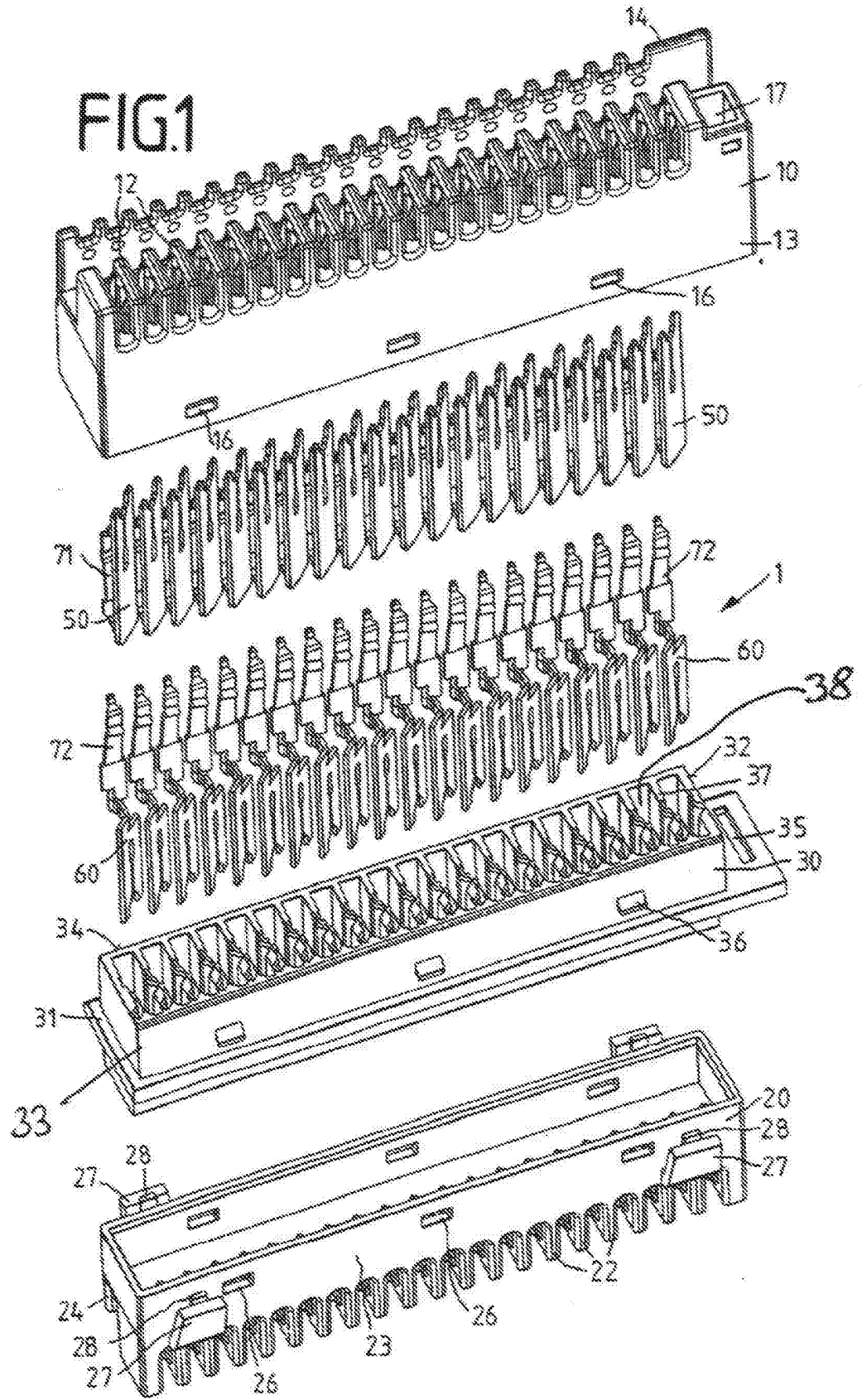
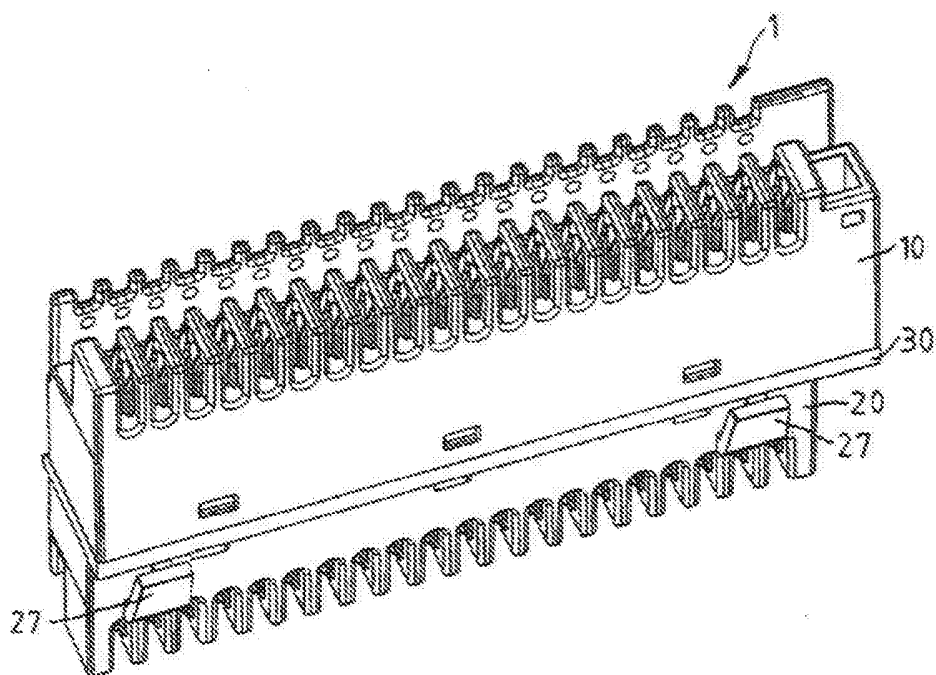


FIG.2





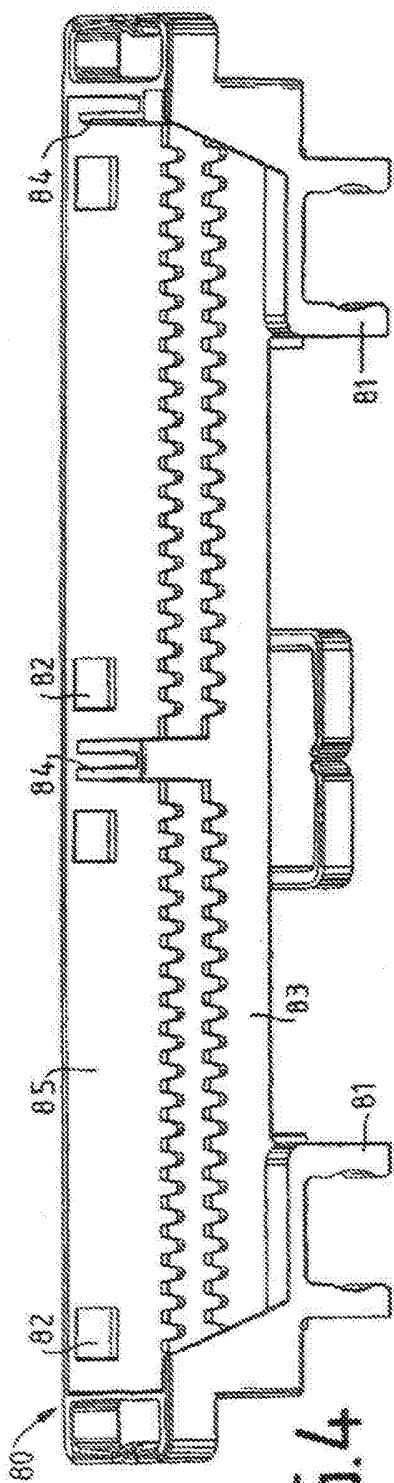


FIG. 4

FIG. 5

