

(19)



(11)

EP 2 695 987 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:
09.12.2015 Bulletin 2015/50

(51) Int Cl.:
D06F 57/08 (2006.01)

(21) Application number: **13176957.2**

(22) Date of filing: **18.07.2013**

(54) **Telescopic clothes drying rack**

Einfahrbarer Kleidungstrocknungsständer

Panier de séchage de vêtements télescopique

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**

(30) Priority: **09.08.2012 IT PD20120244**

(43) Date of publication of application:
12.02.2014 Bulletin 2014/07

(73) Proprietor: **GIMI S.p.A.
35043 Monselice PD (IT)**

(72) Inventor: **Hem, Sudhana
36020 SOLAGNA VI (IT)**

(74) Representative: **Modiano, Micaela Nadia et al
Modiano & Partners (IT)
Via Meravigli, 16
20123 Milano (IT)**

(56) References cited:
**EP-A1- 2 078 785 EP-A1- 2 481 846
DE-U1-202004 011 846**

EP 2 695 987 B1

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

Description

[0001] The present invention relates to a telescopic clothes drying rack.

[0002] Nowadays a type of clothes drying rack is known and widespread, known as 'telescopic', which comprises a quadrangular frame with first, tubular rodlike components, which define, with the quadrangular frame structure, a main rack for hanging laundry; supporting legs, generally of the folding scissors type, are pivoted to the longitudinal members of the frame by way of pin holder blocks.

[0003] The main rack is extendable in the direction of extension of the first rodlike components by way of at least one associated extractable secondary rack, which comprises a U-shaped frame from which extend second rodlike components which can be extracted telescopically from the first rod-like elements.

[0004] A similar telescopic clothes drying rack is disclosed, for example, in EP2078785A1 in the name of GIMI S.P.A., and in german utility model patent DE202004011846 by SUPERBETA S.P.A..

[0005] Such telescopic clothes drying racks, although appreciated can be improved.

[0006] In fact, the telescopic nature of such clothes drying racks means that the lateral bars of the U-shaped frame slide within the longitudinal members of the quadrangular frame of the main rack.

[0007] Such technical solution requires that the tubes that define the longitudinal members have openings to the environment, i.e. openings from which the bars of the frames of the secondary side racks extend; such openings risk defeating the external anti-corrosion paint treatments carried out on such tubes, which are usually made of carbon steel and thus are subject to corrosion, it is thus possible for the corrosion to set in from the inner surface of the tubes, which by way of the openings can be affected by humidity and environmental agents in general.

[0008] An additional drawback of such clothes drying racks consists in that, since the longitudinal members of the main rack are available for the translation within them of the bars of the frames of the side racks, the legs of the clothes drying rack are not pivoted to such longitudinal members, but to plastic blocks or other equivalent additional parts, made specially and fixed to surround the longitudinal members, such blocks having an especially contoured and perforated portion in order to allow the hingeing of the legs.

[0009] The use of a block of plastic, or other equivalent additional part, involves a cost in terms of production and assembly.

[0010] The aim of the present invention is to provide a telescopic clothes drying rack that is capable of overcoming the above mentioned drawbacks suffered by conventional telescopic clothes drying racks.

[0011] Within this aim, an object of the invention is to provide a telescopic clothes drying rack that is more re-

sistant to corrosion with respect to the prior art.

[0012] Another object of the invention is to provide a telescopic clothes drying rack that is simpler and inexpensive both in terms of production and in terms of assembly.

[0013] Another object of the invention is to provide a telescopic clothes drying rack that is made using standardized components that can also be used for making clothes drying racks of different types.

[0014] Another object of the invention is to provide a telescopic clothes drying rack that can be produced using known systems and technologies.

[0015] This aim and these and other objects which will become better evident hereinafter are achieved by a telescopic clothes drying rack, comprising a quadrangular frame with first, tubular rodlike components, which define a main rack for hanging laundry, and with supporting legs, said main rack being extendable in the direction of extension of said first rodlike components by way of at least one associated extractable secondary rack, which comprises a U-shaped frame from which second rodlike components extend which can be extracted telescopically from said first rodlike elements, **characterized in that** the lateral bars of said U-shaped frame of the at least one extractable secondary rack are arranged so as to slide externally to the longitudinal members of said main rack, each one of said lateral bars being supported and guided by a corresponding support on which a through hole for the guiding and sliding of the corresponding lateral bar is defined, said support being fixed to said quadrangular frame.

[0016] Further characteristics and advantages of the invention will become better apparent from the description of a preferred, but not exclusive, embodiment of the telescopic clothes drying rack according to the invention, which is illustrated by way of non-limiting example in the accompanying drawings wherein:

Figure 1 is a perspective view of the clothes drying rack according to the invention in a first configuration of use;

Figure 2 is a perspective view of the clothes drying rack according to the invention in a second configuration of use;

Figure 3 is an exploded perspective view of part of the clothes drying rack according to the invention; Figure 4 is an additional perspective view of a different part of the clothes drying rack according to the invention;

Figure 5 is a detail of the clothes drying rack according to the invention;

Figure 6 shows further details of the clothes drying rack according to the invention.

[0017] With reference to the figures, a telescopic clothes drying rack according to the invention is generally designated with the reference numeral 10.

[0018] The clothes drying rack 10 comprises a quad-

angular frame 11 with first rodlike components 12, tubular, which define a main rack 13 for hanging laundry.

[0019] The clothes drying rack 10 comprises supporting legs which should be understood as being of known type.

[0020] The main rack 13 is extendable in the direction of extension of the first rodlike components 12 by way of two opposite extractable secondary racks 15 and 16.

[0021] Each secondary rack, for example the rack 15, clearly visible in exploded form in Figure 3, comprises a U-shaped frame 17 from which extend second rodlike components 18, which can be extracted telescopically from the first, tubular rod-like elements 12.

[0022] Such first, tubular rod-like elements 12 are obviously understood to be of conventional type.

[0023] The peculiarity of the clothes drying rack 10 according to the invention is that the lateral bars 19 and 20 of the U-shaped frame 17 of the secondary rack 15 are arranged so as to slide externally to the longitudinal members 21 and 22 of the main rack 13.

[0024] Each one of the lateral bars 19 and 20 is supported and guided by a corresponding support 23 and 24 on which a through hole 25 and 26 respectively is defined, for the guiding and sliding of the corresponding lateral bar 18 or 19.

[0025] The support 23 and 24 is fixed to the quadrangular frame 11, as described in more detail hereinafter.

[0026] Each support, 23 and 24, is constituted by a block made of plastic material, on which there is a first portion, 27 and 28 respectively, which is contoured so as to accommodate by snap interlocking a corresponding longitudinal member 21 or 22 of the quadrangular frame 11, and a second portion 29 and 30 on which the through hole 25 and 26 is defined for the passage and support of the lateral bar 19 or 20.

[0027] Two symmetrical blocks made of plastic material, which define the supports 23 and 24, are joined by an intermediate portion 31 for covering a corresponding crossmember, 32 or 33, of the quadrangular frame 11.

[0028] The two blocks made of plastic material which define the supports 23 and 24, and the intermediate portion 31 are provided monolithically by molding plastic material.

[0029] The intermediate portion 31 is also contoured so as to accommodate by snap interlocking the respective crossmember 32 or 33.

[0030] A guiding and stroke limiting slider 36 and 37 is fixed to the free end 34 and 35 of each lateral bar 19 and 20 of the U-shaped frame 17 of a secondary rack 15 and 16, as shown in Figures 4, 5 and 6.

[0031] Each guiding and stroke limiting slider, for example 36, comprises a first portion 38 for fixing to the free end 34 or 35, and a second, substantially annular portion 39 which is adapted to surround the corresponding longitudinal member 21 or 22.

[0032] The first portion 38 is also substantially annular, with a wall 40 for covering the edge of the free end 34 or 35 of the corresponding lateral bar 19 or 20.

[0033] The guiding and stroke limiting sliders 36 and 37 are fixed to the respective free end of the lateral bars by way of a pin 48 or 49.

5 [0034] The second rodlike components 18 are constituted in pairs by a portion of metallic wire 42 which is bent into a U-shape.

[0035] The central portion 43 of the U-shaped frame 17 has holes 44 for the passage of the rodlike components 18, and longitudinal recesses 45 which are contoured to each receive a corresponding transverse portion 46 of the metallic wire which is bent into a U-shape 42.

10 [0036] The central portion 43 and the transverse portions 45 are covered by a panel 47, made of plastic material, which is contoured for engagement by snap interlocking with the central portion 43.

15 [0037] Such telescopic clothes drying rack 10 as described above fully achieves the intended aim and objects.

[0038] In fact, with the invention a telescopic clothes drying rack 10 is devised which is more resistant to corrosion with respect to the prior art, since the quadrangular frame 11 of the central rack 13 has no opening for the passage of the lateral bars 19 and 20 of the frame 17 of the side racks 15 or 16 within the quadrangular frame 11, since such lateral bars 19 and 20 slide externally to the longitudinal members 21 and 22 of the quadrangular frame 11.

20 [0039] Moreover, with the invention a telescopic clothes drying rack 10 is devised in which the legs 14 are pivoted directly to the quadrangular frame 11 and not to an intermediate block made of plastic material which is especially made and installed; in fact, since the lateral bars of the U-shaped frame of the side racks slide externally to the longitudinal members of the quadrangular frame, those same longitudinal members are available to be passed through by a pin for the coupling of the legs, thus simplifying the components of the clothes drying rack overall, as well as its assembly.

30 [0040] Moreover, with the invention a telescopic clothes drying rack is devised which is simpler and inexpensive both in terms of production and in terms of assembly; in fact the quadrangular frame 11 is standardized so as to be usable in the same way for the production of a clothes drying rack with secondary racks that fold in the manner of a book, and the application of the telescopically extractable secondary racks is easily obtainable with the use of the supports 23 and 24 and the application of stroke limiting sliders 36 and 37 to the lateral bars of the U-shaped frames 17 of the secondary racks 15 and 16.

40 [0041] Last but not least, with the invention a telescopic clothes drying rack is devised which can be produced using known systems and technologies.

45 [0042] The invention, thus conceived, is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims. Moreover, all the details may be substituted by other, technically equivalent elements.

[0043] In practice the materials employed, provided they are compatible with the specific use, and the contingent dimensions and shapes, may be any according to requirements and to the state of the art.

[0044] Where technical features mentioned in any claim are followed by reference signs, such reference signs have been inserted for the sole purpose of increasing the intelligibility of the claims and accordingly such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A telescopic clothes drying rack (10), comprising a quadrangular frame (11) with first rodlike components (12) which define a main rack (13) for hanging laundry, and with supporting legs (14), said main rack (13) being extendable in the direction of extension of said first rodlike components (12) by way of at least one associated extractable secondary rack (15), which comprises a U-shaped frame (17) from which second rodlike components (18) extend which can be extracted telescopically from said first rodlike elements (12), **characterized in that** the lateral bars (19, 20) of said U-shaped frame (17) of the at least one extractable secondary rack (15) are arranged so as to slide externally to the longitudinal members (21, 22) of said main rack (13), each one of said lateral bars (19, 20) being supported and guided by a corresponding support (23, 24) on which a through hole (25, 26) for the guiding and sliding of the corresponding lateral bar (19, 20) is defined, said support (23, 24) being fixed to said quadrangular frame (11).
2. The clothes drying rack according to claim 1, **characterized in that** each support (23, 24) is constituted by a block made of plastic material, on which there is a first portion (27, 28), which is contoured so as to accommodate by snap interlocking a corresponding longitudinal member (21, 22) of the quadrangular frame (11), and a second portion (29, 30), on which the through hole (25, 26) is defined for the passage and support of the lateral bar (19, 20).
3. The clothes drying rack according to claim 1, **characterized in that** two symmetrical blocks made of plastic material, which define the support (23, 24), are joined by an intermediate portion (31) for covering a corresponding crossmember (32, 33) of the quadrangular frame (11).
4. The clothes drying rack according to claim 3, **characterized in that** said two blocks made of plastic material that define the supports (23, 24) and the intermediate portion (31) are provided monolithically by molding plastic material.

5. The clothes drying rack according to claim 1, **characterized in that** a guiding and stroke limiting slider (36, 37) is fixed to a free end (34, 35) of each lateral bar (19, 20) of the U-shaped frame (17) of a secondary rack (15, 16).
6. The clothes drying rack according to claim 5, **characterized in that** each guiding and stroke limiting slider (36, 37) comprises a first portion (38) for fixing to a free end (34, 35) of a lateral bar (19, 20) and a second, substantially annular portion (39) which is adapted to surround a corresponding longitudinal member (21, 22).
7. The clothes drying rack according to claim 6, **characterized in that** said first portion (38) is annular, with a wall (40) for covering the edge of the free end (34, 35) of the corresponding lateral bar (19, 20).
8. The clothes drying rack according to claim 1, **characterized in that** said second rodlike components (18) are constituted in pairs by a portion of metallic wire (42) which is bent into a U-shape.

Patentansprüche

1. Teleskopischer Kleidungstrocknungsständer (10), mit einem viereckigen Rahmen (11) mit ersten stabförmigen Bauteilen (12), welche ein Hauptgestell (13) zum Aufhängen von Wäsche definieren, und mit Stützbeinen (14), wobei das Hauptgestell (13) in der Erstreckungsrichtung der ersten stabförmigen Bauteile (12) mittels zumindest eines zugehörigen ausziehbaren sekundären Gestells (15) erweiterbar ist, welches einen U-förmigen Rahmen (17) aufweist, von welchem sich zweite stabförmige Bauteile (18) erstrecken, welche teleskopisch von den ersten stabförmigen Elementen (12) ausgezogen werden können, **dadurch gekennzeichnet, dass** die Seitenstangen (19, 20) des U-förmigen Rahmens (17) des zumindest einen ausziehbaren sekundären Gestells (15) angeordnet sind, um außen an den Längselementen (21, 22) des Hauptgestells (13) zu gleiten, wobei jede der Seitenstangen (19, 20) durch eine entsprechende Stütze (23, 24) gestützt und geführt ist, an welchen ein Durchgangsloch (25, 26) zum Führen und Gleiten der entsprechenden Seitenstange (19, 20) definiert ist, wobei die Stütze (23, 24) am viereckigen Rahmen (11) befestigt ist.
2. Kleidungstrocknungsständer nach Anspruch 1, **dadurch gekennzeichnet, dass** jede Stütze (23, 24) durch einen aus Kunststoffmaterial bestehenden Block gebildet ist, an welchem sich ein erster Teil (27, 28), welcher konturiert ist, um durch einen Schnappverschluss ein entsprechendes Längselement (21, 22) des viereckigen Rahmens (11) aufzu-

nehmen, sowie ein zweiter Teil (29, 30) befindet, an welchem das Durchgangsloch (25, 26) für den Durchgang und die Stütze der Seitenstange (19, 20) definiert ist.

3. Kleidungsstrocknungsständer nach Anspruch 1, **dadurch gekennzeichnet, dass** zwei aus Kunststoffmaterial bestehende symmetrische Blöcke, welche die Stütze (23, 24) definieren, durch einen Zwischenteil (31) zum Abdecken eines entsprechenden Querlements (32, 33) des viereckigen Rahmens (11) verbunden sind.
4. Kleidungsstrocknungsständer nach Anspruch 3, **dadurch gekennzeichnet, dass** die zwei aus Kunststoffmaterial bestehenden Blöcke, die die Stützen (23, 24) definieren, und der Zwischenteil (31) durch Formen von Kunststoffmaterial monolithisch vorgeesehen sind.
5. Kleidungsstrocknungsständer nach Anspruch 1, **dadurch gekennzeichnet, dass** ein führender und hubbegrenzender Gleiter (36, 37) an einem freien Ende (34, 35) jeder Seitenstange (19, 20) des U-förmigen Rahmens (17) eines sekundären Gestells (15, 16) befestigt ist.
6. Kleidungsstrocknungsständer nach Anspruch 5, **dadurch gekennzeichnet, dass** jeder führende und hubbegrenzende Gleiter (36, 37) einen ersten Teil (38) zum Befestigen an einem freien Ende (34, 35) einer Seitenstange (19, 20) und einen zweiten, im Wesentlichen ringförmigen Teil (39) aufweist, welcher dazu ausgebildet ist, ein entsprechendes Längselement (21, 22) zu umgeben.
7. Kleidungsstrocknungsständer nach Anspruch 6, **dadurch gekennzeichnet, dass** der erste Teil (38) ringförmig ist, mit einer Wand (40) zum Abdecken der Kante des freien Endes (34, 35) der entsprechenden Seitenstange (19, 20).
8. Kleidungsstrocknungsständer nach Anspruch 1, **dadurch gekennzeichnet, dass** die zweiten stabförmigen Bauteile (18) paarweise durch einen Teil von metallischem Draht (42) gebildet sind, welcher in eine U-Form gebogen ist.

Revendications

1. Etendoir à linge télescopique (10), comprenant un châssis quadrangulaire (11) avec des premiers composants en forme de tige (12) qui définissent une première grille (13) destinée à suspendre du linge, et avec des pieds de support (14), ladite première grille (13) pouvant être étendue suivant la direction d'extension desdits premiers composants en forme

de tige (12) au moyen d'au moins une grille secondaire extractible (15) associée, qui comprend un châssis en forme de U (17) à partir duquel des seconds composants en forme de tige (18) s'étendent, lesquels peuvent être extraits de manière télescopique à partir desdits premiers éléments en forme de tige (12), **caractérisé en ce que** les barres latérales (19, 20) dudit châssis en forme de U (17) de la au moins une grille secondaire extractible (15) sont agencées afin de coulisser de manière externe sur les éléments longitudinaux (21, 22) de ladite grille principale (13), chacune desdites barres latérales (19, 20) étant supportée et guidée par un support (23, 24) correspondant sur lequel un orifice traversant (25, 26) destiné à assurer le guidage et le coulisement de la barre latérale (19, 20) correspondante est défini, ledit support (23, 24) étant fixé sur ledit châssis quadrangulaire (11).

2. Etendoir à linge selon la revendication 1, **caractérisé en ce que** chaque support (23, 24) est constitué par un bloc réalisé en une matière plastique, sur lequel se trouve une première partie (27, 28), qui est profilée de manière à recevoir par verrouillage réciproque à encliquetage, un élément longitudinal (21, 22) correspondant du châssis quadrangulaire (11), et une seconde partie (29, 30), sur laquelle l'orifice traversant (25, 26) est défini afin d'assurer le passage et le support de la barre latérale (19, 20).
3. Etendoir à linge selon la revendication 1, **caractérisé en ce que** deux blocs symétriques réalisés en une matière plastique, qui définissent le support (23, 24), sont reliés par une partie intermédiaire (31) afin de recouvrir un élément transversal correspondant (32, 33) du châssis quadrangulaire (11).
4. Etendoir à linge selon la revendication 3, **caractérisé en ce que** lesdits deux blocs réalisés en une matière plastique qui définissent les supports (23, 24) et la partie intermédiaire (31) sont agencés de manière monolithique par moulage d'une matière plastique.
5. Etendoir à linge selon la revendication 1, **caractérisé en ce qu'un** coulisseau de guidage et de limitation de course (36, 37) est fixé sur une extrémité libre (34, 35) de chaque barre latérale (19, 20) du châssis en forme de U (17) d'une grille secondaire (15, 16).
6. Etendoir à linge selon la revendication 5, **caractérisé en ce que** chaque coulisseau de guidage et de limitation de course (36, 37) comprend une première partie (38) destinée à être fixée à une extrémité libre (34, 35) d'une barre latérale (19, 20) et une seconde partie sensiblement annulaire (39) qui est adaptée de manière à entourer un élément longitudinal (21, 22) correspondant.

7. Etendoir à linge selon la revendication 6, **caractérisé en ce que** ladite première partie (38) est annulaire, une paroi (40) étant destinée à recouvrir le bord de l'extrémité libre (34, 35) de la barre latérale (19, 20) correspondante. 5
8. Etendoir à linge selon la revendication 1, **caractérisé en ce que** lesdits seconds composants en forme de barre (18) sont constitués par paires à partir d'une partie d'un fil métallique (42) qui est pliée en une forme de U. 10

15

20

25

30

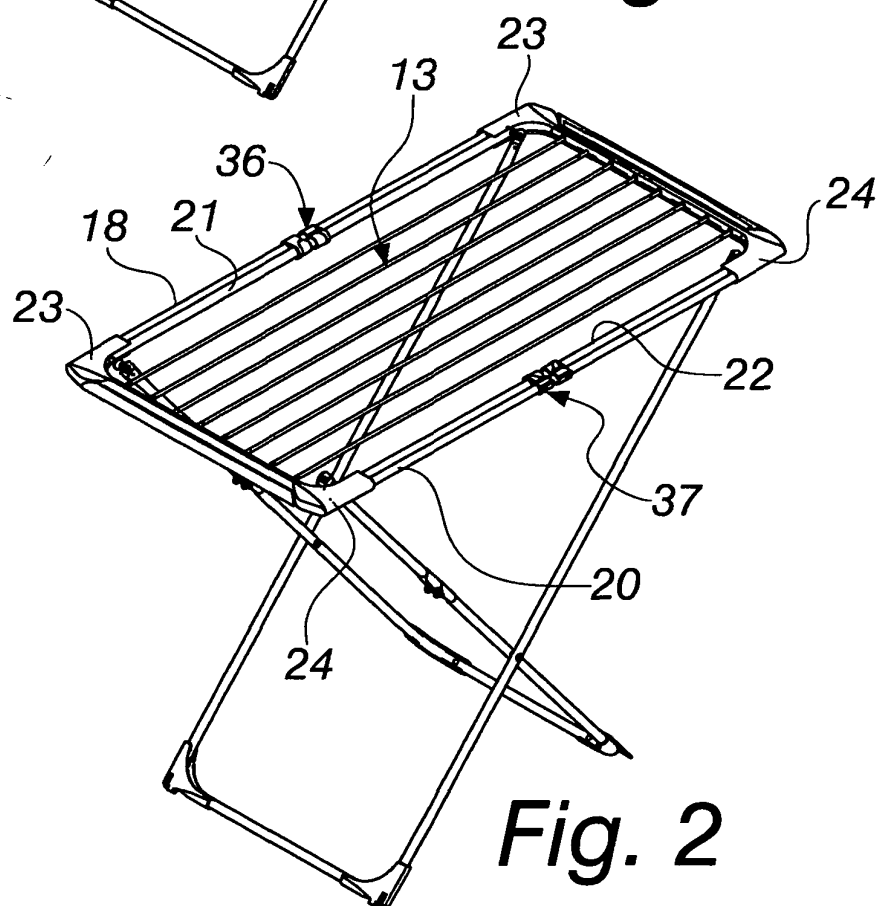
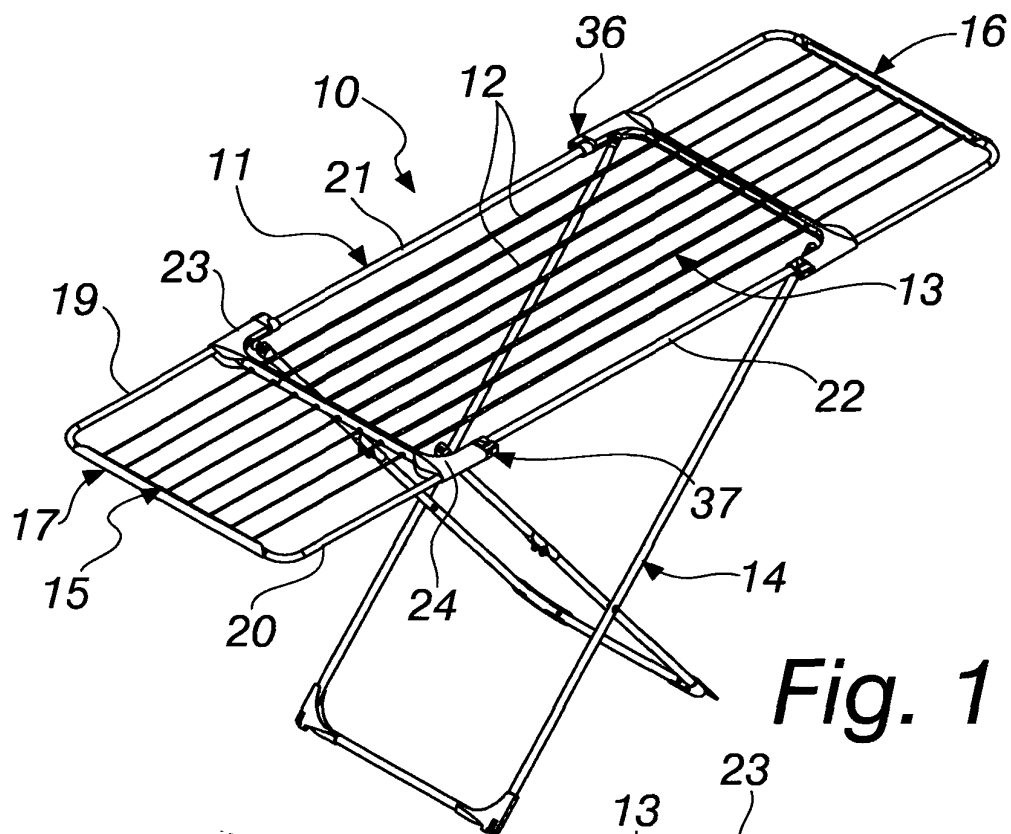
35

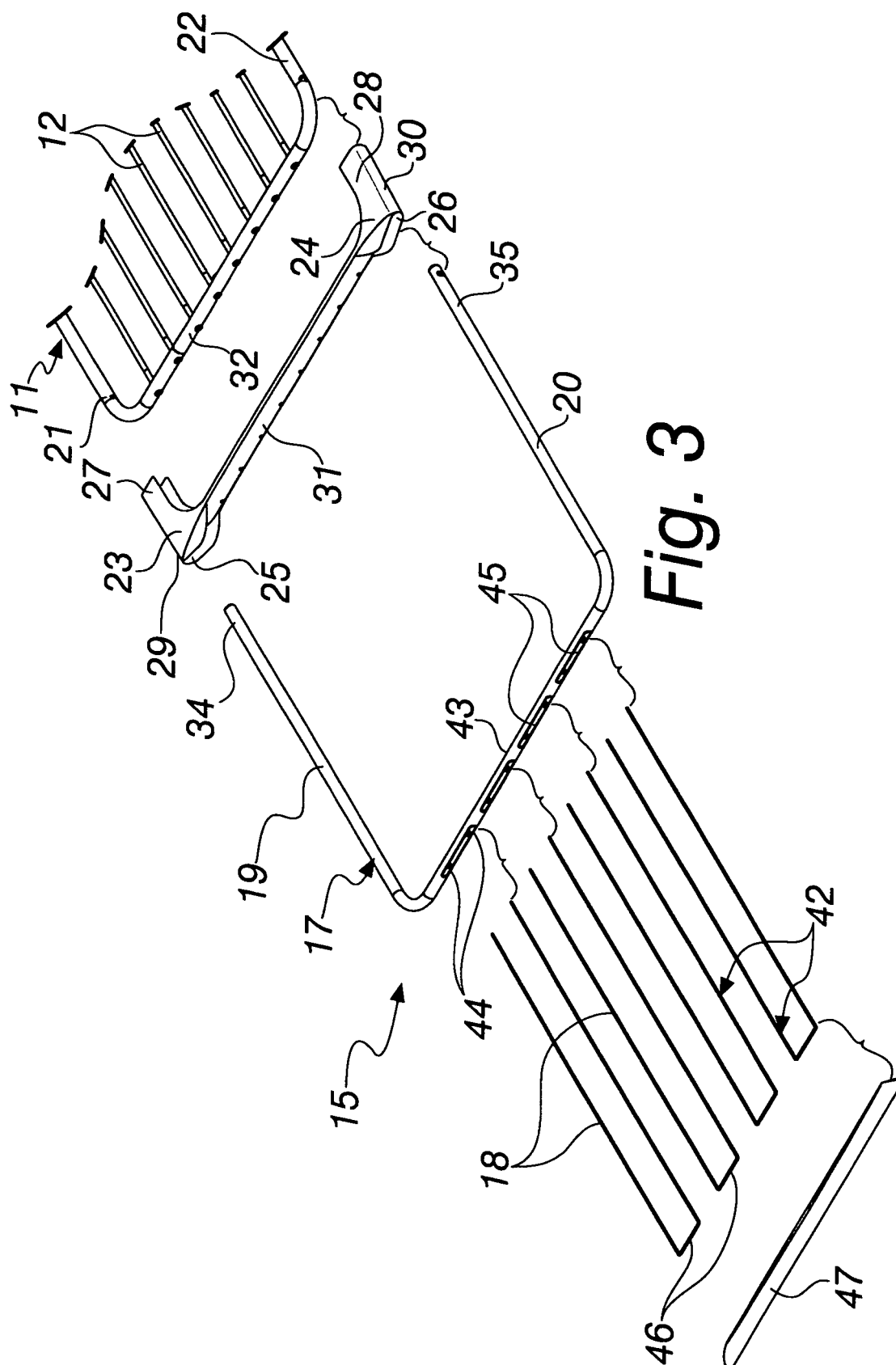
40

45

50

55





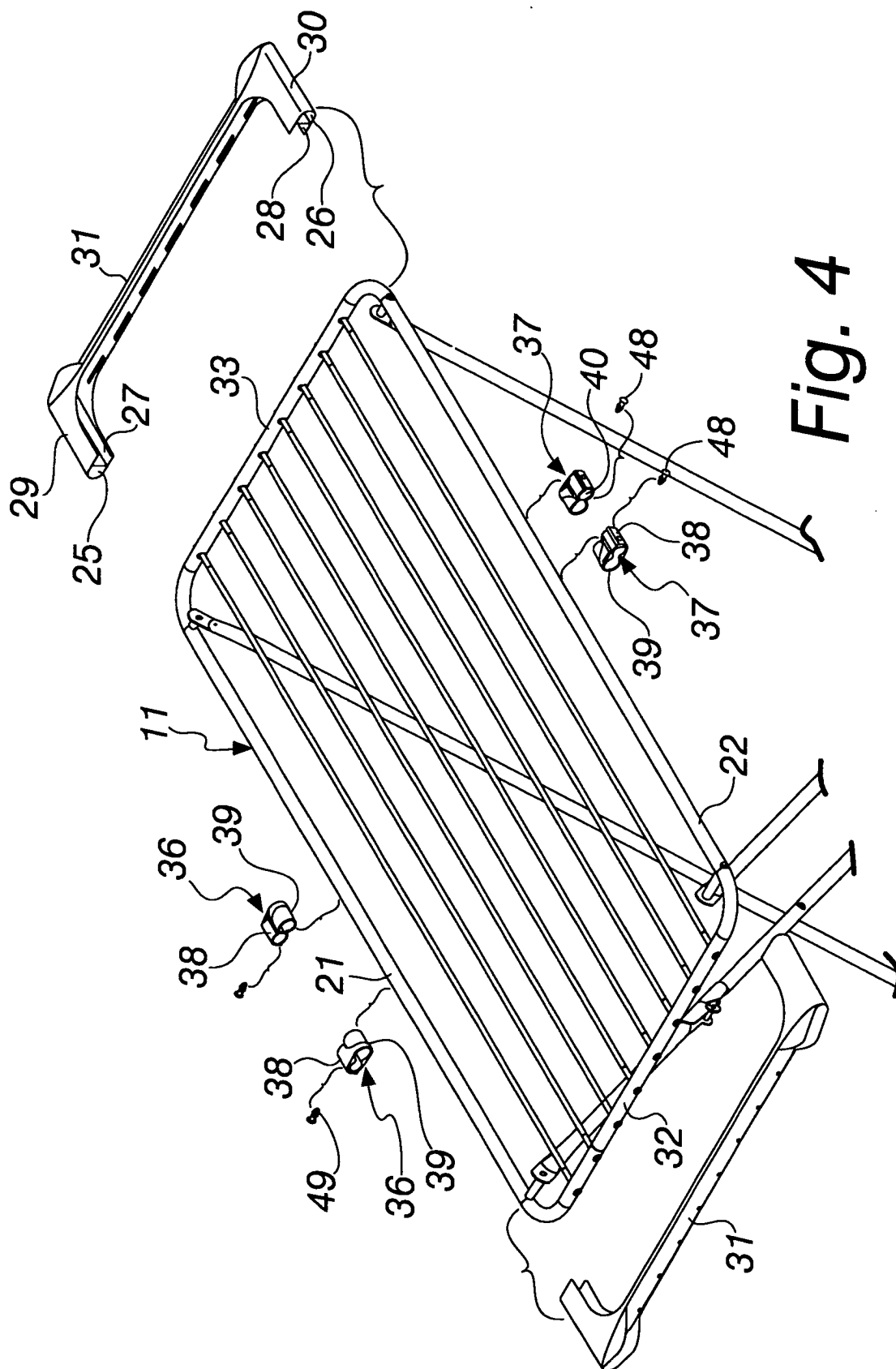


Fig. 4

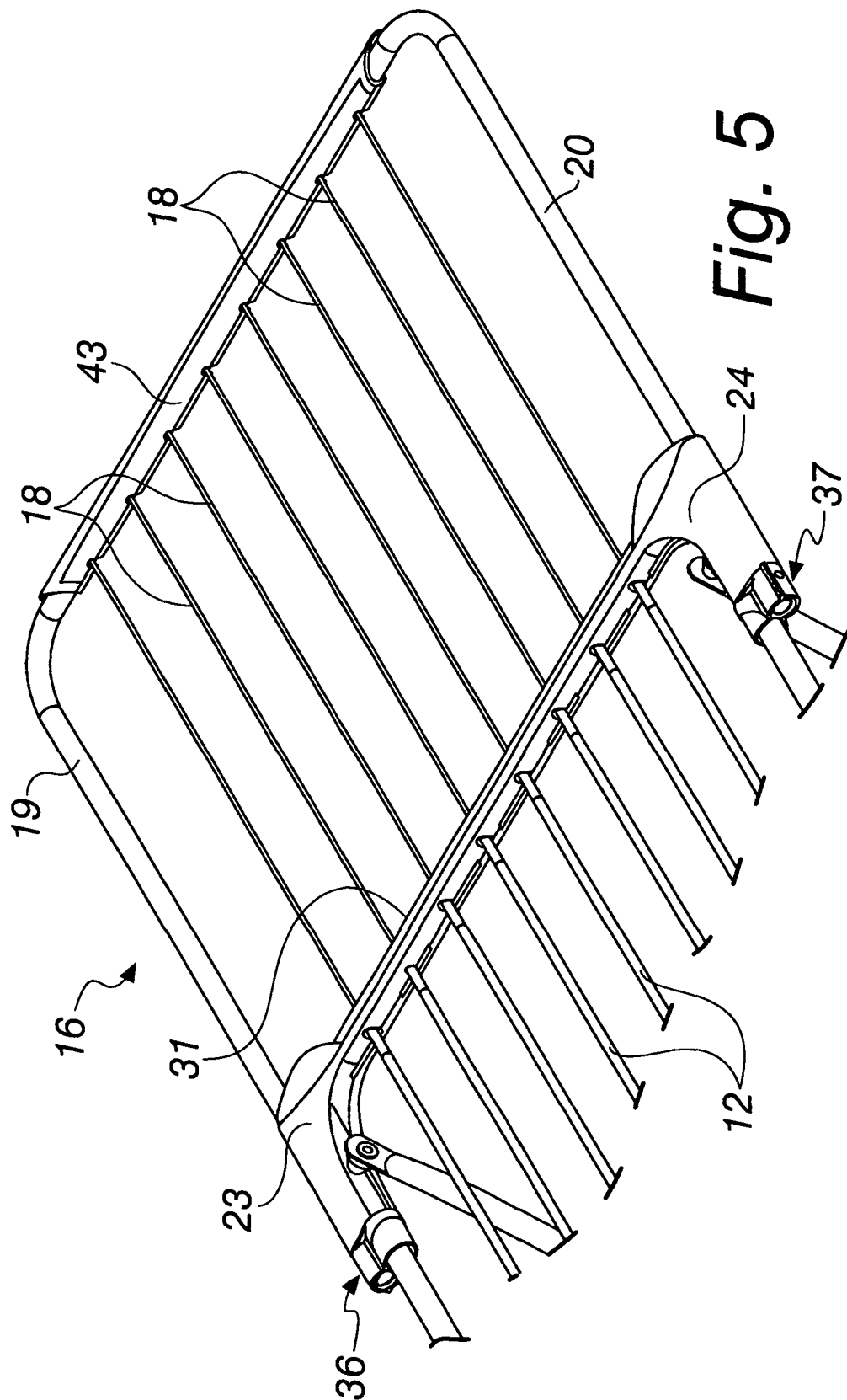


Fig. 5

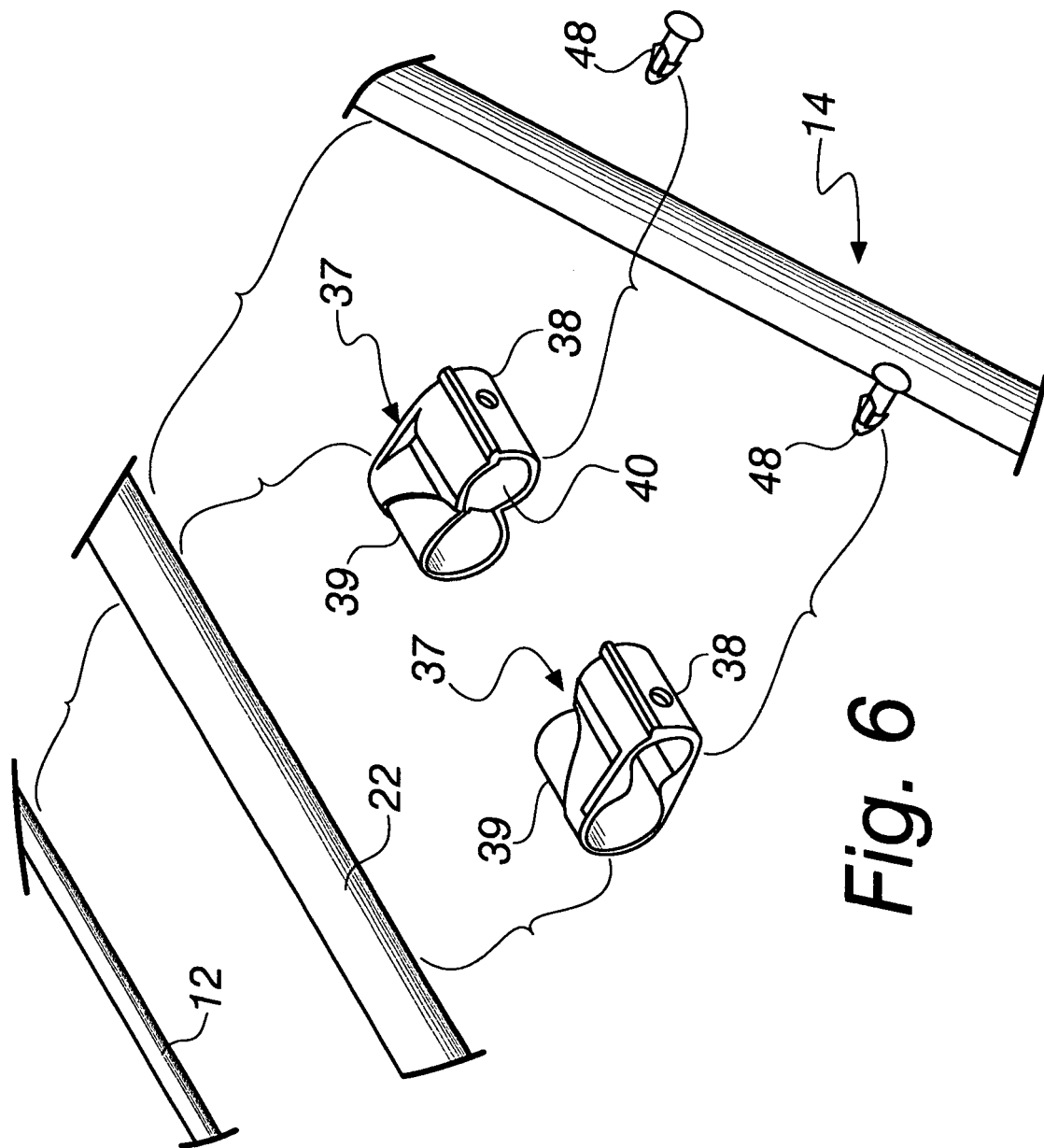


Fig. 6

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- EP 2078785 A1 [0004]
- DE 202004011846 [0004]