# (11) EP 2 078 785 A1

(12)

## **EUROPEAN PATENT APPLICATION**

(43) Date of publication:15.07.2009 Bulletin 2009/29

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

(21) Application number: 08171857.9

(22) Date of filing: 16.12.2008

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

**Designated Extension States:** 

AL BA MK RS

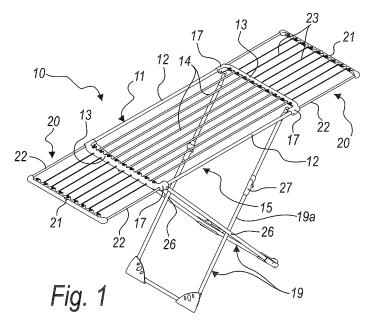
(30) Priority: 08.01.2008 IT PD20080001 U

- (71) Applicant: GIMI S.p.A. 35043 Monselice PD (IT)
- (72) Inventor: Miola, Adriano 35024 Bovolenta PD (IT)
- (74) Representative: Modiano, Micaela Nadia et al Dr. Modiano & Associati SpA Via Meravigli 16 20123 Milano (IT)

### (54) Clothes drying rack

(57) A clothes drying rack (10), comprising a structure with a quadrangular frame (11) that is constituted by a pair of first longitudinal members (12) and a pair of first cross-members (13), between which first rod-like components (14) are arranged which form, together with the quadrangular frame structure (11), a main grid (15) for hanging clothes; supporting legs (19) are pivoted to the longitudinal members (12) by means of blocks (17) for supporting the pivot (18); the main grid (15) is reversibly extendable by means of at least one associated extractable grid (20), which comprises a U-shaped structure constituted by a second cross-member (21), from which second lateral longitudinal members (22) extend, second

rod-like components (23) being provided parallel to the second longitudinal members (22); the second longitudinal members (22) and the second rod-like components (23) are telescopically extractable respectively from the first longitudinal members (12) and from the first rod-like components (14). On the outside of each free end of the second longitudinal members (22), inside the corresponding first longitudinal member (12), there is a wider portion (24) that is designed for extraction-preventing abutment against a pivot (18) for pivoting the legs (19), which is supported by the respective block (17) so as to intersect the end portion of the first longitudinal member (12), protruding into it through a corresponding opening (25) on the first longitudinal member (12).



20

25

40

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

1

**[0002]** The aim of the present invention is to provide a clothes drying rack whose main grid for hanging clothes to dry can be extended in full safety.

**[0003]** Within this aim, an object of the present invention is to provide a clothes drying rack that is structurally simple and cheap to manufacture, like similar clothes drying racks of the known type.

**[0004]** Another object of the present invention is to provide a clothes drying rack whose extendibility in full safety is provided by means of solutions that are simple both to provide and to use.

[0005] Another object of the present invention is to provide a clothes drying rack that can be handled easily even by a user who does not have particular prior teachings.
[0006] Another object of the present invention is to provide a clothes drying rack that can be manufactured with known systems and technologies.

[0007] This aim and these and other objects, which will become better apparent hereinafter, are achieved by a clothes drying rack, characterized in that it comprises a structure with a quadrangular frame that is constituted by a pair of first longitudinal members and a pair of first cross-members, between which first rod-like components are arranged which form, together with said quadrangular frame structure, a main grid for hanging clothes, supporting legs being pivoted to said longitudinal members by means of pivot supporting blocks, said main grid being reversibly extendable in the longitudinal direction of said first rod-like components by means of at least one associated extractable grid, which comprises a Ushaped structure constituted by a second cross-member, from which second lateral longitudinal members extend, second rod-like components being provided parallel to said second longitudinal members, said second longitudinal members and said second rod-like components being telescopically extractable respectively from said first longitudinal members and from said first rod-like components, on the outside of each free end of said second longitudinal members, and arranged inside the corresponding first longitudinal member, there being a wider portion that is designed for extraction-preventing abutment against a leg pivoting pivot, which is supported by the respective block so as to intersect the end portion of the first longitudinal member, protruding into it through a corresponding opening on said first longitudinal member. [0008] Further characteristics and advantages of the invention will become better apparent from the following detailed description of a preferred but not exclusive embodiment thereof, illustrated by way of non-limiting ex-

Figure 1 is a perspective view of a clothes drying rack according to the invention;

ample in the accompanying drawings, wherein:

Figure 2 is a top view of a portion of a clothes drying

rack according to the invention;

Figure 3 is a side view of a detail, taken along the sectional line III-III of Figure 2.

**[0009]** With reference to the figures, a clothes drying rack according to the invention is generally designated by the reference numeral 10.

**[0010]** The clothes drying rack 10 comprises a quadrangular frame structure 11, which in turn is constituted by a pair of first longitudinal members 12 and a pair of first cross-members 13.

**[0011]** First rod-like components 14 are arranged between the first cross-members 13 and parallel to the first longitudinal members, and form, together with the quadrangular frame structure 11, a main grid 15 for hanging clothes.

**[0012]** Supporting legs 19 are pivoted to the longitudinal members 12 by way of blocks 17 for supporting a pivot 18.

**[0013]** The main grid 15 can be extended reversibly in the longitudinal direction of the rod-like components 14 by way of two associated extractable grids 20.

**[0014]** Each one of the extractable grids 20 comprises a U-shaped structure, which is constituted by a second cross-member 21 from which second lateral longitudinal members 22 extend, second rod-like components 23 being provided parallel to the second lateral longitudinal members 22.

**[0015]** The second longitudinal members 22 and the second rod-like components 23 can be extracted telescopically and reversibly respectively from the first longitudinal members 12 and from the first rod-like components 14.

**[0016]** On the outside of each free end of the second longitudinal members 22, inside the corresponding first longitudinal member 12, there is a wider portion 24, which is designed for extraction-preventing abutment against a pivot 18 for pivoting the legs 19, as shown in Figure 3. **[0017]** The pivot 18 is supported by the respective

block 17 so as to intersect the end portion of the first longitudinal member 12, protruding into it through a corresponding opening 25 on the first longitudinal member 12.

**[0018]** The wider portion 24 is constituted by a sleeve, which is keyed to the end of the second longitudinal member 22.

**[0019]** Each one of the first cross-members 13 is made of plastic material, and two opposite blocks 17 for supporting one pivot 18 protrude from it monolithically.

**[0020]** The supporting legs 19 are of the type that can be folded in a scissor-like fashion.

**[0021]** The supporting legs 19 are constituted by two separate U-shaped legs, each of which is pivoted, by the ends of the U-shape, to the blocks 17 arranged at the ends of the two longitudinal members 12.

**[0022]** The horizontal portions of the U-shaped legs 19 act as a supporting base.

[0023] A first leg 19a has, above a hinge point 26 for

10

15

20

25

30

35

40

45

50

pivoting to the second U-shaped leg, on both arms of the U-shape, respective joints 27 to allow 180° folding of the first leg 19a, in order to allow a flattened configuration on the quadrangular frame structure 11 to be assumed.

[0024] In practice it has been found that the invention thus described achieves the proposed aim and objects. [0025] In particular, the present invention provides a clothes drying rack whose main grid for hanging clothes to be dried can be extended in full safety, by way of the sleeves on the free ends of the second longitudinal members 22 and of the pivots 18 that form corresponding extraction-preventing abutments for such sleeves and therefore for the extractable grids 20; therefore, a user who pulled the extractable grids with excessive force cannot, even inadvertently, cause their separation from the main grid 15.

**[0026]** Therefore, the present invention provides a clothes drying rack whose extendibility in full safety is provided by means of solutions that are simple to provide and to use.

**[0027]** Moreover, the present invention provides a clothes drying rack that is structurally simple and cheap to provide, like similar clothes drying racks of the known type.

**[0028]** Moreover, the invention provides a clothes drying rack that can be handled easily even by a user who does not have particular prior teachings.

**[0029]** Moreover, the present invention provides a clothes drying rack that can be manufactured with known systems and technologies.

**[0030]** The invention thus conceived is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

**[0031]** In practice, the materials used, so long as they are compatible with the specific use, as well as the dimensions, may be any according to requirements and to the state of the art.

**[0032]** The disclosures in Italian Utility Model Application No. PD2008U000001 from which this application claims priority are incorporated herein by reference.

**[0033]** Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included 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.

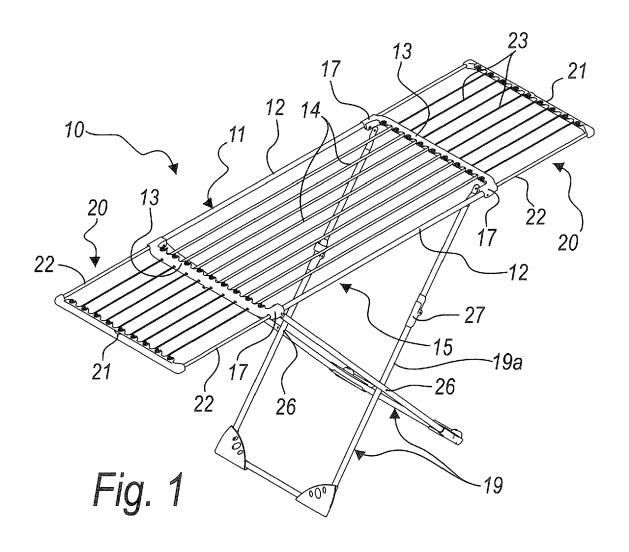
### **Claims**

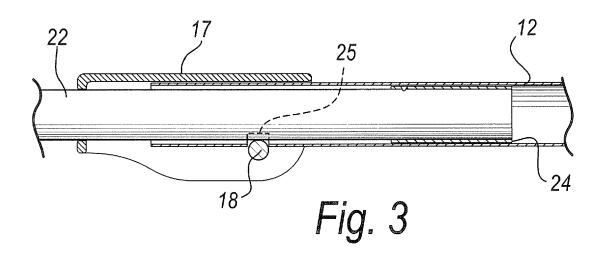
1. A clothes drying rack (10), characterized in that it comprises a structure with a quadrangular frame (11) that is constituted by a pair of first longitudinal members (12) and a pair of first cross-members (13), between which first rod-like components (14) are arranged which form, together with said quadrangular frame structure (11), a main grid (15) for hanging

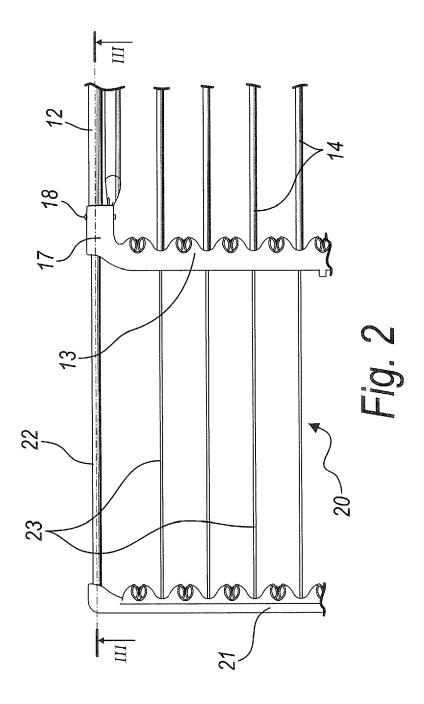
clothes, supporting legs (19) being pivoted to said longitudinal members (12) by means of blocks (17) for supporting the pivot (18), said main grid (15) being reversibly extendable in the longitudinal direction of said first rod-like components (14) by means of at least one associated extractable grid (20), which comprises a U-shaped structure constituted by a second cross-member (21), from which second lateral longitudinal members (22) extend, second rodlike components (23) being provided parallel to said second longitudinal members (22), said second longitudinal members (22) and said second rod-like components (23) being telescopically extractable respectively from said first longitudinal members (12) and from said first rod-like components (14), on the outside of each free end of said second longitudinal members (22), and arranged inside the corresponding first longitudinal member (12), there being a wider portion (24) that is designed for extraction-preventing abutment against a leg pivoting pivot (18), which is supported by the respective block (17) so as to intersect the end portion of the first longitudinal member (12), protruding into it through a corresponding opening (25) on said first longitudinal member (12).

- 2. The clothes drying rack according to claim 1, characterized in that said wider portion (24) is constituted by a sleeve that is keyed to the end of the second longitudinal member (22).
- 3. The clothes drying rack according to the preceding claims, characterized in that each one of said first cross-members (13) is made of plastic material, and two opposite blocks (17) for supporting a pivot (18) extend monolithic ally therefrom.
- 4. The clothes drying rack according to the preceding claims, characterized in that it comprises two of said at least one extractable grids (20).
- 5. The clothes drying rack according to the preceding claims, characterized in that said supporting legs (19) are of the type that can fold in a scissor-like fashion.
- 6. The clothes drying rack according to the preceding claim, characterized in that said supporting legs (19) are constituted by two separate U-shaped legs, each of which is pivoted by the ends of the U-shape to the blocks (17) arranged at the ends of said two longitudinal members (12), the horizontal portions of said legs (19) acting as a supporting base, a first leg (19a) having, above the hinge point (26) with the second U-shaped leg, on both arms of the U-shape, respective joints (27) to allow 180° folding of said first leg (19a), in order to allow the assumption of a flattened shape on said quadrangular frame structure (11).

3









# **EUROPEAN SEARCH REPORT**

**Application Number** 

EP 08 17 1857

Category	Citation of document with in			Relevant	CLASSIFICATION OF THE APPLICATION (IPC)
Х	DE 20 2004 011846 U	II (SUPERBETA S	P A 1	to claim -5	INV.
	<pre>[IT]) 30 September * paragraph [0036] figures 1.5 *</pre>	- paragraph [00	052];		D06F57/08
Υ			6		
Х	EP 0 882 834 A (GAR ZUMBUEHL & CO HANDE 9 December 1998 (19 * column 4, line 1	[LSAGENTUR [CH]] 198-12-09)		,3-5	
Α				,6	
Х	EP 1 790 767 A (GIM 30 May 2007 (2007-0	05-30)		-3,5	
	* paragraph [0015] figure 1 *	- paragraph [00	029];		
Υ			6		
A	DE 101 61 319 A1 (6 25 July 2002 (2002- * paragraph [0019]		1	-6	
			)22] *		TECHNICAL FIELDS SEARCHED (IPC)
					D06F
	The present search report has	•			
	Place of search	Date of completio			Examiner
	Munich	6 April			nam, Martin
	ATEGORY OF CITED DOCUMENTS	E:	heory or principle un earlier patent docum		
Y : part docu	icularly relevant if taken alone icularly relevant if combined with anoti iment of the same category nological background	her D: L:0	after the filing date document cited in the document cited for ot	her reasons	
O: non	-written disclosure rmediate document	&::	member of the same		

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

EP 08 17 1857

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.

06-04-2009

	Patent document ed in search report		Publication date		Patent family member(s)		Publication date
DE	20200401184	l6 U1	30-09-2004	NONE	<u> </u>		1
EP	0882834	A	09-12-1998	AT DE ES IT	209718 59802206 2164393 BS970066	D1 T3	15-12-200 10-01-200 16-02-200 04-12-199
EP	1790767	Α	30-05-2007	ΙΤ	PD20050096	U1	28-02-200
DE	10161319	A1	25-07-2002	ΙΤ	PD20000289	A1	21-06-200

 $\stackrel{\rm O}{\mbox{\tiny dis}}$  For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

# EP 2 078 785 A1

#### 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

• IT PD20080001 U [0032]