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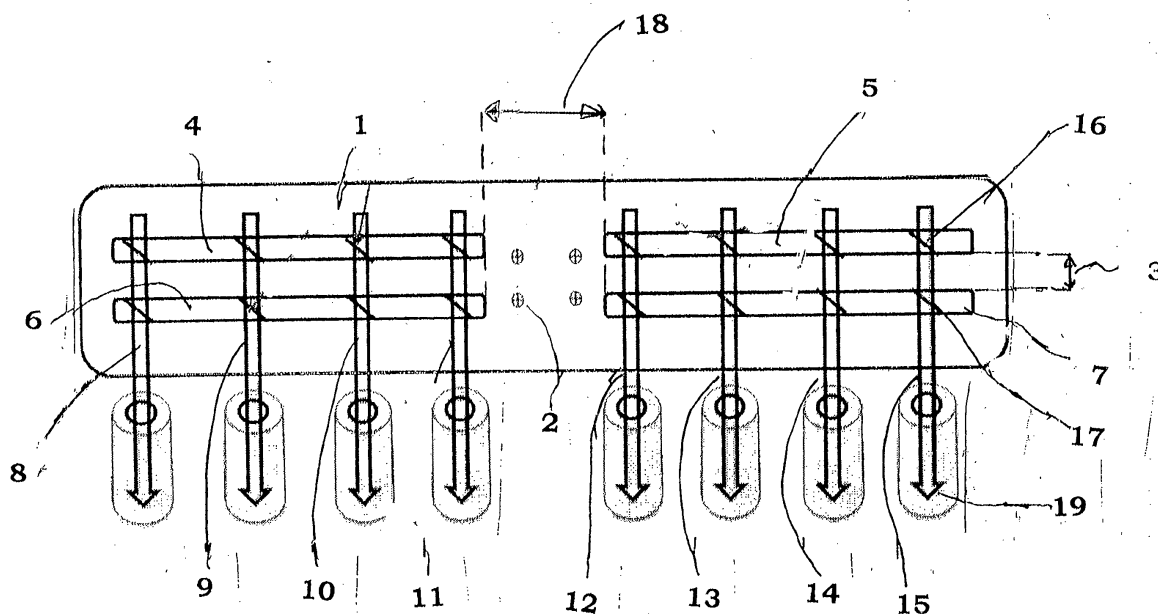
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Designated Extension States:

BA ME(71) Applicant: **Wallin, John****172 65 Sundbyberg (SE)**(72) Inventor: **Wallin, John****172 65 Sundbyberg (SE)**(74) Representative: **Lundquist, Arne****Väsbyströmsvägen 2****139 50 Värmdö (SE)**(30) Priority: **24.06.2013 SE 1300444**(54) **Device for cleaning of profiled surfaces, especially roof coverings**

(57) A device for cleaning of profiled surfaces, especially roof coverings, is disclosed. It comprises a support, carrying a number of side to side vertically arranged pins (8-15). The support is designed like a vertical plate (1) with horizontal elongation. This plate (1) is carried (2) by

a shaft, and is provided with at least two parallel horizontal grooves (4,5,6,7), arranged at a first distance (3) from each other. In these said pins (8-15) are mountable directed at right angle to the grooves (4,5,6,7) by bolt connections (16,17).

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Description

[0001] The present invention relates to a device for cleaning of profiled surfaces, especially roof coverings, comprising a support, carrying a number of vertical pins, arranged side by side.

[0002] Such devices are known in a number of more or less complicated embodiments, but until now there has been no simple and efficient device of the art mentioned introductorily, admitting a simple rearrangement for adjustment to the dimensions of the profiled surfaces that is to say to their wave length. This is especially true concerning traditional roof-tiles and roof-sheets, nowadays quite common.

[0003] According to the invention such a device is especially characterized in that the support is designed like a vertical plate with horizontal elongation, which plate is carried by a shaft, substantially directed at right angle thereto, whereas the plate is provided with at least two parallel horizontal grooves, arranged at a distance from each other, wherein said pins are mountable directed at right angle to the grooves by bolt connections. By this design, it is warranted, that the pins may be easily rearranged for adjustment to the dimensions of the profiled surfaces, without risk for the pins to be inclined from their vertical positions.

[0004] Per se two parallel grooves at a first distance from each other are enough, but in one advantageous embodiment there are, at the first distance from each other, each two grooves provided at a second, horizontal distance from each other. With this design it is suitable to lock, preferably releasably, said shaft with a fastening device, located symmetrically within said second distance.

[0005] In order to provide a lenient cleaning it is suitable to surround the pins, at their free ends with a polymer material in foam form, preferably foam rubber. Thereby it is suitable to design the pins at their lower ends with protrusions intended to keep the polymer material on place.

[0006] The device according to the invention is disclosed in the following reference being made to the enclosed schematic figure showing a support with pins and the fastening of a shaft indicated, with the lower portions of the pins showed from above at an inclination.

[0007] In the figure a support, formed as a vertical plate with horizontal elongation is marked by 1. This plate is carried by a shaft, not shown, substantially directed at right angle thereto. The fastening of this is indicated by 2. The plate 1 is provided with four grooves. Of these two grooves are marked by 4 and 5 arranged along a line, at a distance, ie a space 18 from each other.

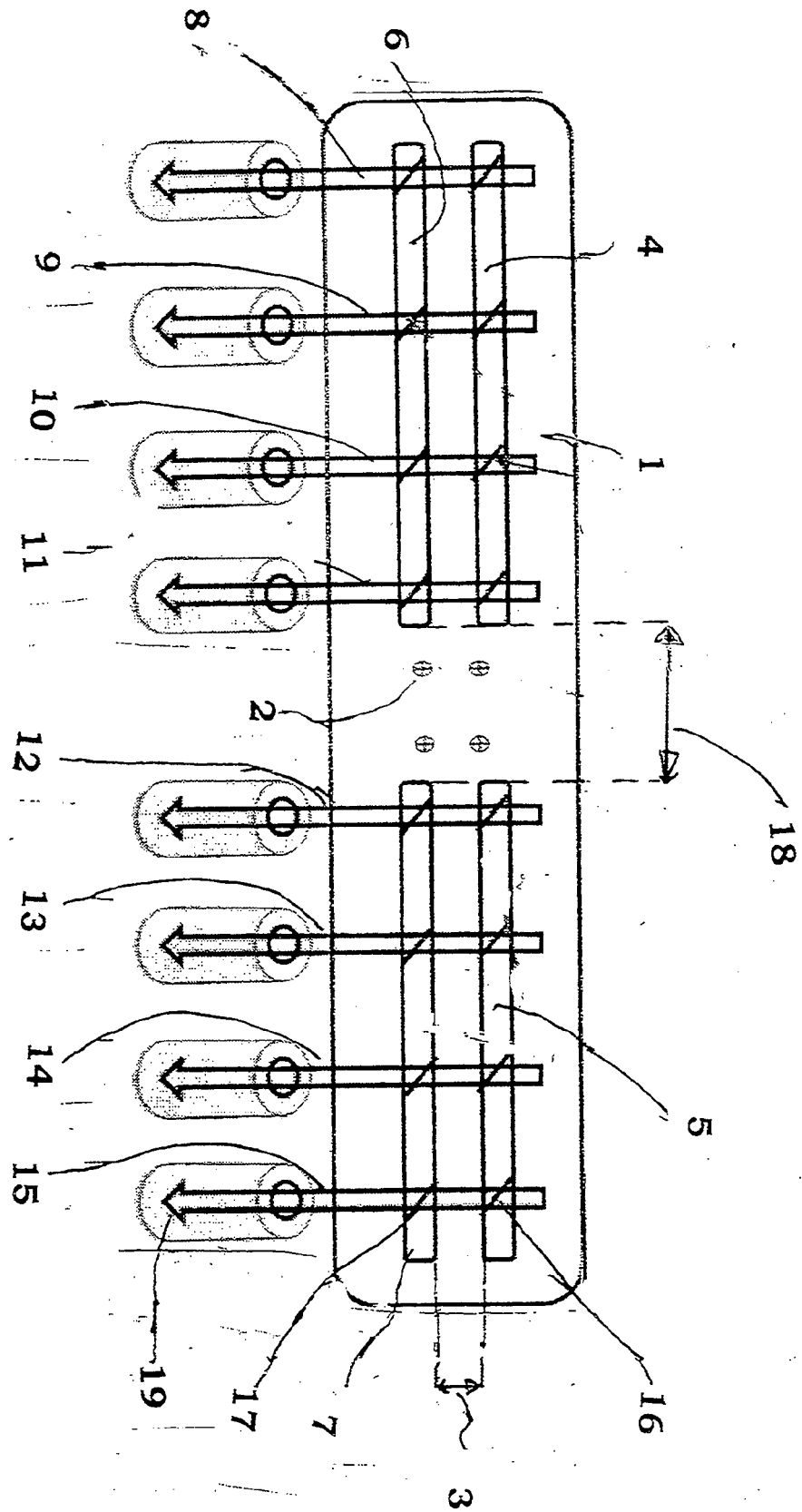
[0008] Parallel to these, at a distance 3 there are provided two grooves marked 6 and 7 along a line with the same space 18 between them.

[0009] In the figure 8 pins divided at two groups are marked from 8 to 15. Only the pin marked 15 with the

bolt connection 16 and 17 in the parallel grooves 5 and 7 is shown for reason of clearness. The bolt connection is suitably designed with a wing nut at the back of the support, ie the plate 1. The other pins 8- 14 are provided with similar bolt connections. The pin 15, as well as the other pins 8- 14, is at its free end surrounded by a polymer material in the form of foam rubber, marked 19, and is at its lower end formed with with protrusion intended to keep the polymer material on place.

Claims

1. A device for cleaning of profiled surfaces, especially roof coverings, comprising a support, carrying a number of vertical pins, arranged side by side
characterized in that
the support is designed like a vertical plate (1) with horizontal elongation, which plate is carried (2) by a shaft, substantially directed at right angle thereto, whereas the plate (1) is provided with at least two parallel horizontal grooves (4,5,6,7), arranged at a first distance (3) from each other, wherein said pins (8- 15) are mountable directed at right angle to the grooves (4,5,6,7) by bolt connections (16,17)
2. A device according to claim 1,
characterized in that
at the first distance (3) from each other, each two grooves (4,5 and 6,7) provided at a second, horizontal distance (18) from each other.
3. A device according to claim 1 or 2,
characterized in that
the pins (8- 15) at their free ends are surrounded by polymer material in foam form (19), preferably foam rubber.
4. A device according to claim 3,
characterized in that
the pins (15) in their lower ends are designed with protrusions, intended to keep the polymer material on place.





EUROPEAN SEARCH REPORT

Application Number
EP 14 00 2121

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 2008/143128 A1 (KUHN ET AL) 19 June 2008 (2008-06-19)	1,2	INV. B08B1/00 E04D15/00 A46B9/10
Y	* abstract *	3,4	
	* paragraph [0002] *		
	* paragraph [0004] *		
	* paragraph [0018] - paragraph [0019] *		
	* paragraph [0038] *		
	* paragraph [0040] - paragraph [0046] *		
	* claims *		
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Y	----- DE 92 11 246 U1 (APA GMBH & CO KG OTTO BAUDER) 5 November 1992 (1992-11-05)	3,4	
A	* page 3, line 1 - line 24 *	1	
	* page 4, line 17 - line 26 *		
	* page 5, line 6 - page 6, line 16 *		
	* claims *		
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	* column 5, line 50 - column 6, line 14 *		
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A	----- WO 2004/060106 A1 (MCDONALD) 22 July 2004 (2004-07-22)	3,4	
	* abstract *		
	* page 4, line 14 - page 5, line 16 *		
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	* figures *		
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 17 December 2014	Examiner van der Zee, Willem
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	

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

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The members are as contained in the European Patent Office EDP file on
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82