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(54) **NON-WELDED AWNING FRAME FIXING STRUCTURE FOR LOUVER AWNING**

(57) The invention relates to a non-welded awning frame fixing structure for a louver awning, comprising a ring beam 1 with at least three ring beams frame and leg tubes 2, wherein ring beam splicing portions are provided at upper ends of the leg tubes, the ring beam splicing portions are used to cooperate with the ring beams for installation, each of the ring beam splicing portions comprises a splicing side wall, a clamp slot 22 formed on the splicing side wall 21, and at least one lateral notch 25, each of the ring beams comprises a ring beam body 11 and an insert piece 16 fixed on a side wall of the ring beam body, and the insert piece 16 and the clamp slot is used to hang the ring beam body on the lateral notch by means of mortise and tenon fit.

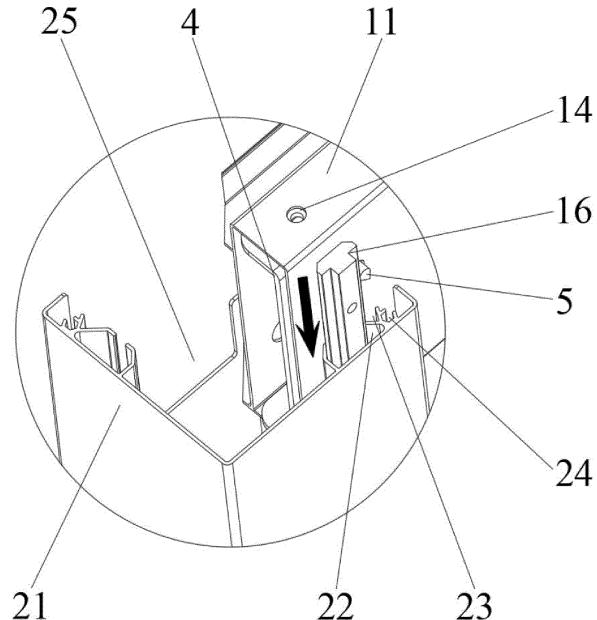


FIG. 5



## EUROPEAN SEARCH REPORT

Application Number

EP 23 16 1244

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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	AU 2020 421 496 A1 (VOLIN DEE [US]) 28 October 2021 (2021-10-28) * figures 3A, 9E, 9G, 2R *	1, 2, 6-10	INV. E04F10/10
A	-----	3-5	
The present search report has been drawn up for all claims			
2			
Place of search		Date of completion of the search	Examiner
Munich		7 December 2023	Cornu, Olivier
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			
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ON EUROPEAN PATENT APPLICATION NO.

EP 23 16 1244

5 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.

07-12-2023

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
15	<b>AU 2020421496 A1</b>	<b>28-10-2021</b>	<b>AU 2020421496 A1</b>	<b>28-10-2021</b>
			<b>CA 3134740 A1</b>	<b>15-07-2021</b>
			<b>CN 114651104 A</b>	<b>21-06-2022</b>
			<b>EP 4087987 A1</b>	<b>16-11-2022</b>
			<b>JP 7311176 B2</b>	<b>19-07-2023</b>
			<b>JP 2022536442 A</b>	<b>17-08-2022</b>
			<b>US 10851544 B1</b>	<b>01-12-2020</b>
20			<b>US 2022325521 A1</b>	<b>13-10-2022</b>
			<b>WO 2021141613 A1</b>	<b>15-07-2021</b>
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