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(54) **Telescopic hang-on ladder**

(57) A telescopic hang-on ladder including a set of ladder elements (1¹, 1², 1³, 1⁴...) coupled to each other so that the sequential ladder elements are telescopically movable relative to each other in order to extend and collapse the ladder. Each ladder element includes two parallel stringers (2¹, 2²) spaced apart from each other. The cross-sectional profile of a stringer comprises a planar web (3), and both long edges of the web comprise guide members, wherein the guide members of the stringer of each upper ladder element constitute a slide guide for the stringer of the adjacent lower ladder element. A step (4) extends between the stringers substantially perpendicularly to the lengthwise direction of the stringers (2¹, 2²) and is mounted at each end to the web (3) of the stringer. The stringers (2¹, 2²) of each ladder element are substantially fitted, for the most of their part, within the corresponding stringers of the adjacent upper ladder element. Both long edges of the web (3) comprise a planar flange (5, 6) bent at an acute angle relative to the plane of the web, wherein the flanges together with the web constitute said guide members, so that each stringer of the upper ladder element constitutes a dovetail guide for the stringer of the lower ladder element fitted within said stringer.

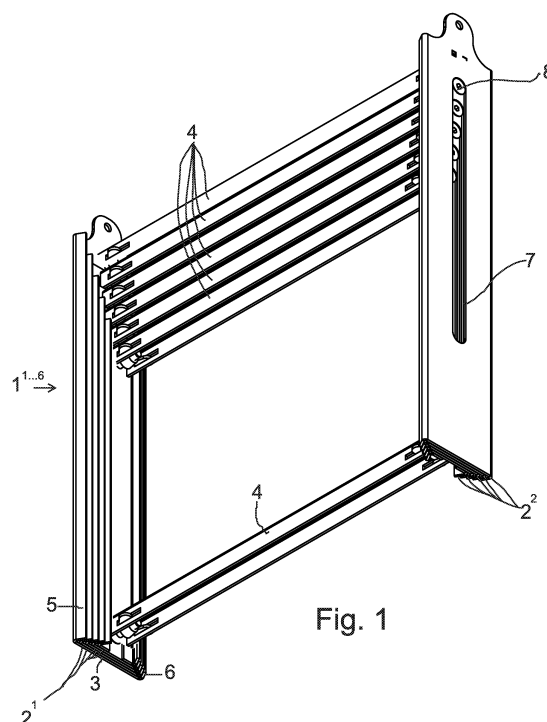


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
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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)
A	US 4 429 766 A (ALIMBAU MARQUES D SALVADOR [ES]) 7 February 1984 (1984-02-07) * figures 4, 5 *	1-4	INV. E06C1/12 E06C9/08 E06C9/14 E06C7/08
A	JP S56 67085 A (MATSUSHITA ELECTRIC WORKS LTD) 5 June 1981 (1981-06-05) * figures 1, 2 *	1-4	
A	US 5 062 499 A (TU CHING-CHUAN [TW]) 5 November 1991 (1991-11-05) * figures 1, 4, 5 *	5-8	
A	US 3 946 833 A (RIEHLMANN JOSEPH F) 30 March 1976 (1976-03-30) * figures 1, 5 *	9-11	
			TECHNICAL FIELDS SEARCHED (IPC)
			E06C
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		4 September 2015	Bauer, Josef
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			

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

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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
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04-09-2015

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4429766 A	07-02-1984	CA 1183110 A1	26-02-1985
		US 4429766 A	07-02-1984
JP S5667085 A	05-06-1981	NONE	
US 5062499 A	05-11-1991	NONE	
US 3946833 A	30-03-1976	NONE	

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