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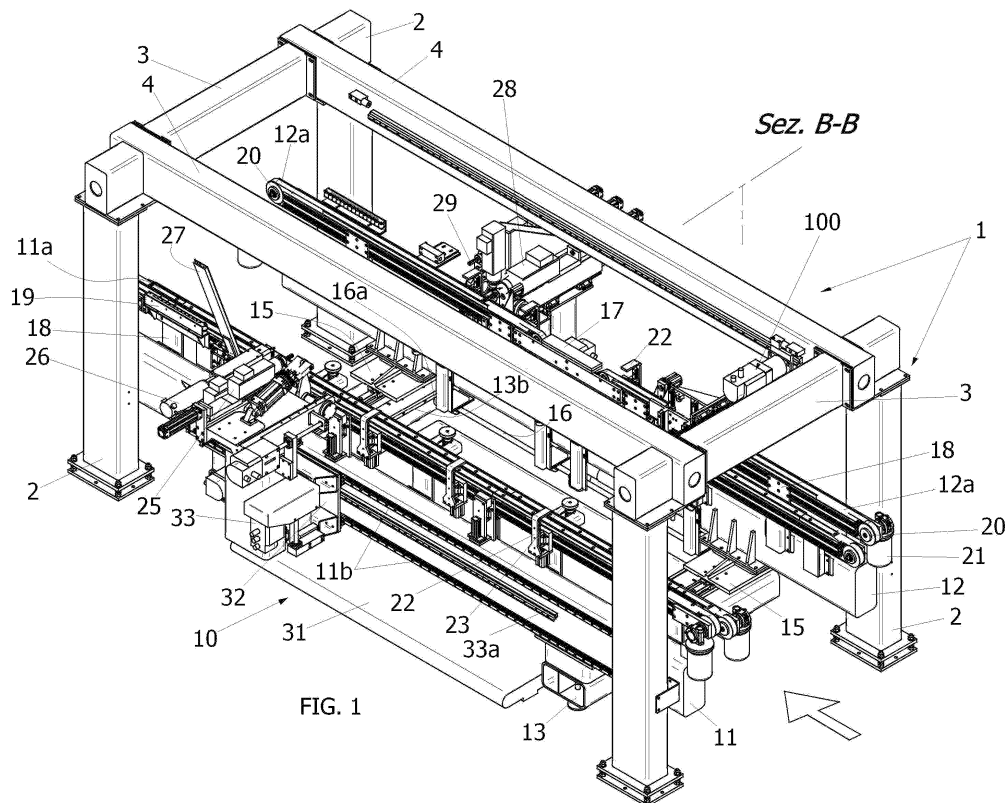
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(54) **Multi-function automatic working machine for door panels.**

(57) The present invention relates to a multi-function automatic working machine for door panels, composed of a bearing frame (1), a first operating unit (10) designed to move a door panel (A) forward in horizontal position and perform machining operations with inward direction

on both longitudinal borders of the door panel, and a second operating unit (100) in upper position designed to perform additional machining operations in downward position on the front surface of the door panel through the entire thickness of the door panel.



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EUROPEAN SEARCH REPORT

Application Number
EP 07 12 2002

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 2006/225813 A1 (KAMEOKA GEORGE Y [US] ET AL) 12 October 2006 (2006-10-12) * abstract * * paragraph [0001] - paragraph [0002] * * paragraph [0034] - paragraph [0035] * * paragraph [0039] * * paragraph [0043] * * paragraph [0046] - paragraph [0047] * * figures * -----	1-7,11, 13-15, 17,18	INV. B27M1/08 B23Q1/01
A	DE 24 16 703 A1 (GIETZELT KG UNIQUICK) 16 October 1975 (1975-10-16) * abstract * * page 1, line 1 - page 2, line 3 * * page 2, line 16 - line 20 * * page 3, line 1 - line 6 * * page 4, line 29 - line 34 * * page 5, line 15 - line 23 * * figures * -----	1	
A	GB 2 295 413 A (JURRAS LTD [IE]) 29 May 1996 (1996-05-29) * abstract * * page 1, line 1 - line 10 * * page 2, line 10 - line 31 * * page 4, line 26 - line 28 * * page 7, line 33 - page 8, line 31 * * figures * -----	1	TECHNICAL FIELDS SEARCHED (IPC) B27M B23Q
-The present search report has been drawn up for all claims			
3	Place of search The Hague	Date of completion of the search 24 June 2008	Examiner Hamel, Pascal
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	

EPO FORM 1503, 03.02.02 (P/AC01)



Application Number

EP 07 12 2002

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
- 1-7, 11, 13-15, 17, 18
- The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 07 12 2002

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-7, 11, 13-15, 17 and 18

The problem of avoiding dead times between the mounting of hinges and locks on a door panel and the machining operations on the same door, is solved by an assembly comprising:

- a first lower unit equipped with means used to support and move forward the door panel in horizontal position, means designed to selectively tighten the door panel, means designed to interfere horizontally inwards direction with the longitudinal borders of the door panel to mount hinges and lock components;
- a second upper unit equipped with means designed to interfere with the surface of the door panel in horizontal position in order to make openings, holes, moulding, fluting and similar operations.

2. claim: 8

The problem of guarantying that the correct orientation of the door panel during the machining and the component mounting process, is solved by an assembly comprising: a second, internal, pair of conveyor belts with horizontal axis in adjacent lower position with respect to the first pair of belts.

3. claims: 9, 10, 19

The problem of improving the stability of the door panel during the machining and the component mounting process, is solved by an assembly comprising: retractable supports designed to interfere with upward direction with two longitudinal sections of the door panel in close position to its symmetrical axis.

4. claim: 12

The problem of installing the hinges in various places of the door in a device doing the machining and the component mounting process, is solved by an assembly comprising: a plate in edgewise position coupled with a pair of rectilinear horizontal guides provided in external position on the longitudinal element.

5. claim: 16



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 07 12 2002

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

The problem of keeping the machine in a clean state during process, is solved by an assembly comprising:
a conveyor belt, provided in close position to the ground.

6. claim: 20

The problem of supporting the tool of the milling unit when the milling unit interferes in downward direction with the door panel, is solved by an assembly comprising:
a conveyor belt made of two different perfectly aligned sections, with a removable wooden strip in intermediate position.

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

EP 07 12 2002

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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24-06-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006225813 A1	12-10-2006	NONE	
DE 2416703 A1	16-10-1975	NONE	
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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82