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07.02.2022 DE 202022100676 U
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(54) **VARIABLE RESERVOIR DEVICE FOR FEEDING ONE-PIECE FIXING TIES TO AN AUTOMATIC BUNDLING TOOL DEVICE**

(57) The disclosure relates to a reservoir device (1) for feeding one-piece fixing ties, OPTs (2), to an automatic bundling tool device, ABT (15), wherein the reservoir device (1) is configured to detachably hold the OPTs (2) on at least one carrier unit (3) of the reservoir device (1), in a row, with the carrier unit (3) having a base (4) and being configured to be moved to or through the ABT (15) in order to have the OPTs (2) detached from the

carrier unit (3); where the at least one carrier unit (3) is a unit separate from the OPTs (2); and the at least one carrier unit (3) is configured to have the respective OPT (2) detachably attached to the carrier unit (3) by a respective interface element (7) configured to receive and hold the respective OPT (2) on the carrier unit (3) so as to enable a flexible feeding of different types of one-piece fixing ties (2) to automatic bundling tool devices (15).

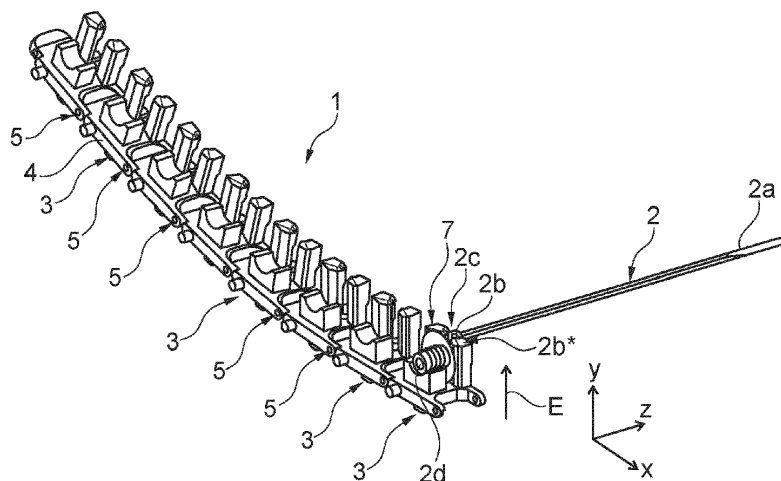


Fig. 1



EUROPEAN SEARCH REPORT

Application Number

EP 22 20 2471

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 31 August 2023	Examiner Yazici, Baris
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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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)
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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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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:

☐ 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

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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: 1-9, 14, 15

**mechanical connections between carrier units and protrusions
arranged on the carrier units.**

2. claims: 10, 11

**different types of carrier units for different types of
fixing ties.**

3. claims: 12, 13

**a feeding device with a stepwise conveyor mechanism and an
ejector.**

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

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