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(54) **Device for connecting a tool to a driving means of a working machine**

(57) Device for connecting a tool (T) to a driving means (A) of a working machine; said device comprising a first member (2) and a second member (3), fit to be fixed to the tool (T) and to the driving means (A), and provided with hooking means (4,5) for the mutual removable hooking; one of said members (3,2) being furthermore provided with at least a bolt means (6) fixed to a moving means (9) sliding in this latter member (3,2) between an internal condition and an external condition of the at least one bolt means (6) in which this latter can engage, in a hooking and approaching condition between the members (2,3), at least a seat (7) of a matching means (8) of the other member (2,3) to carry out, cooperating with the hooking means (4,5), the connecting condition (C) between the tool and the driving means; the device (1) comprising furthermore elastic means (11) acting on the moving means (9) in direction of the external condition of the at least one bolt means (6) and one blocking means of (10) fit to carry out a removable stop condition of the moving means (9) at least in the internal condition

translate said moving mean (9) and the at least one bolt means (6) engaging this latter in the at least one seat (7) carrying out the connecting condition (C).

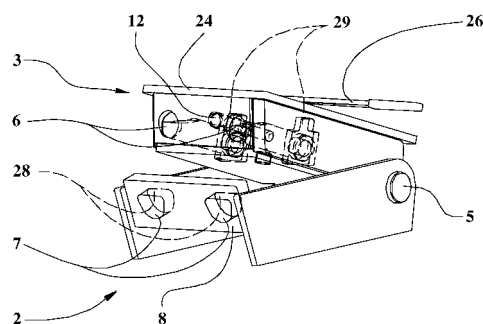


FIG.2

Said device (1) comprises a mobile feeler means (12), associated to one of the members (3,2), turned toward the matching means (8) at least in conditions next to the approaching condition, and acting on the blocking means (10); said feeler means (12) being driven, at least in proximity of the condition of the approaching condition of the members, from its matching with the matching means (8) to act on the blocking means (10) to unblock the moving means (9) allowing the elastic means (11) to



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EUROPEAN SEARCH REPORT

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EP 07 11 6263

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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-The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 8 May 2008	Examiner Papadimitriou, S
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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EPO FORM 1503 03.82 (P04201)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims 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 the first ten claims.

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:
1,2,5-13,17,23,24,25
- ☐ 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).



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LACK OF UNITY OF INVENTION
SHEET B

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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: 1,2

a compact coupling device.

2. claims: 1,3,4

a less complex trigger means for the locking means of a coupling device.

3. claims: 1,5-13,23

a blocking means for for the locking means of a coupling device.

4. claims: 1,14,15,16,18,19,20,21,22

a locking means for a coupling device with enhanced strength and load transfer capabilities.

5. claims: 1,17,24,25 (when appendant on claim 17)

a readily manipulatable coupling device with a simplified hooking action.

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

EP 07 11 6263

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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08-05-2008

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