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(54) **Quick-change device for excavators**

(57) A quick-change device (1) is disclosed for connecting implements to an excavator while simultaneously connecting hydraulic conduits, wherein the quick-change device has a main body (2) in which at least one locking component (9,10,11) is accommodated, wherein the main body (2) is confined or terminated at the sides by one-piece side plates (3,4), wherein the at least one locking component (9,10,11) extends and moves essentially parallel to the side plates. Furthermore, a quick-change device is disclosed for connecting implements to an ex-

cavator while simultaneously connecting hydraulic conduits, wherein the quick-change device has a main body in which at least one locking component is accommodated, wherein the main body is confined or terminated at the sides by one-piece side plates, wherein the at least one locking component extends and moves essentially parallel to the side plates, wherein the side portions, in an area near to the position where the at least one locking component exits or extends from the main body, respectively have a recess (15) for engagement with a corresponding bolt or projection on the implement.

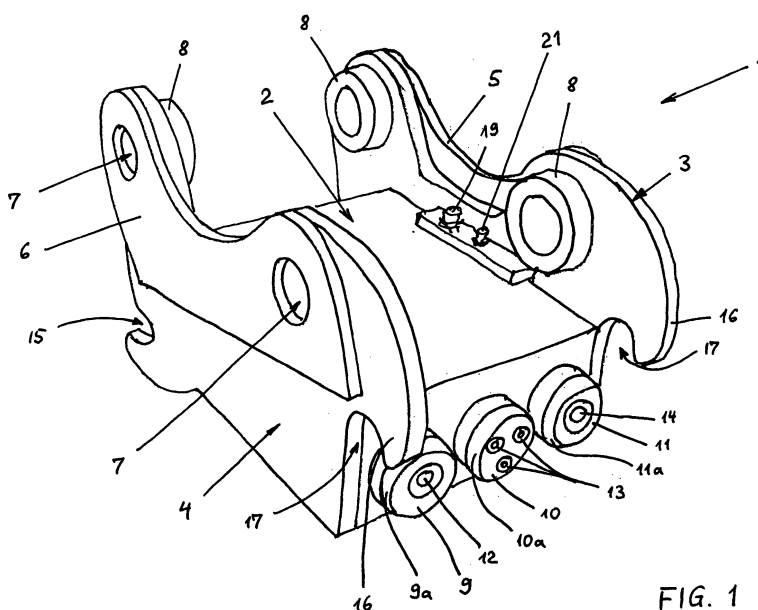


FIG. 1



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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)
X	US 2001/004904 A1 (HORTON LEE A ET AL) 28 June 2001 (2001-06-28)	1,4,5, 7-10,13, 14	E02F3/36
Y	* paragraphs [0005] - [0010] * * paragraph [0020] * * paragraph [0022] * * paragraph [0077] * * figures 1-5 *	11,12, 15-18	
Y	----- GB 2 372 979 A (PETER WILLIAM * SCOTT) 11 September 2002 (2002-09-11) * page 1 - page 4 * * figures 1-3 *	11,12, 15-18	
A	----- US 5 890 871 A (WOERMAN ET AL) 6 April 1999 (1999-04-06) * column 2, lines 45-65 * * figures 1-3 *	11,12	
D,A	----- US 5 465 513 A (SONERUD ET AL) 14 November 1995 (1995-11-14) * column 2, lines 23-65 * * figures 1,2 * -----	1	TECHNICAL FIELDS SEARCHED (IPC) E02F
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
		14 December 2005	Verheul, O
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.**

EP 05 00 6635

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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14-12-2005

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2001004904 A1	28-06-2001	CA 2279023 A1	29-01-2000
		EP 0976962 A2	02-02-2000
		JP 3207400 B2	10-09-2001
		JP 2000055276 A	22-02-2000
		JP 2001235079 A	31-08-2001
		US 6196265 B1	06-03-2001
		US 6220291 B1	24-04-2001
		US 6460569 B1	08-10-2002
		US 6230740 B1	15-05-2001

GB 2372979 A	11-09-2002	NONE	

US 5890871 A	06-04-1999	NONE	

US 5465513 A	14-11-1995	AT 137550 T	15-05-1996
		CA 2117095 A1	18-03-1993
		DE 69210405 D1	05-06-1996
		DE 69210405 T2	05-12-1996
		DK 602165 T3	16-09-1996
		EP 0602165 A1	22-06-1994
		ES 2088153 T3	01-08-1996
		FI 940873 A	24-02-1994
		JP 2736286 B2	02-04-1998
		JP 6510343 T	17-11-1994
		SE 467742 B	07-09-1992
		SE 9102566 A	07-09-1992
		WO 9305241 A1	18-03-1993
