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(54) **Grinding apparatus with a slot nozzle**

(57) Apparatus for high speed grinding comprises a grinding wheel having a circumferential grinding surface, a machine for mounting and rotating the grinding wheel about the axis, a coolant supply system including a slot

nozzle arranged to direct coolant fluid secantly to the grinding surface, the slot nozzle having an exit with an elongate axis and a short axis wherein the elongate axis is tilted relative to the axis of the grinding wheel.

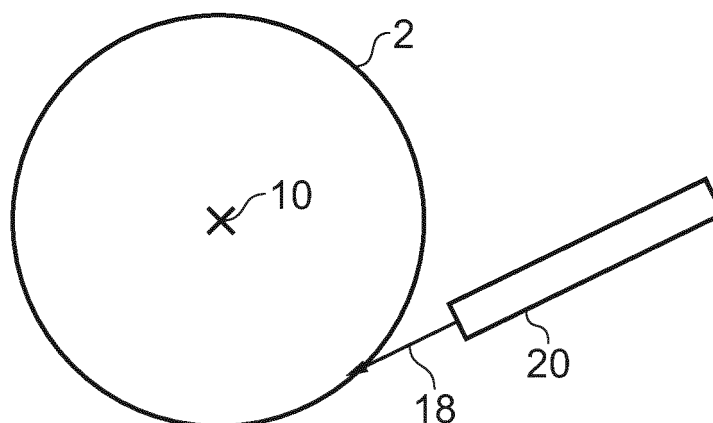


FIG. 3(a)

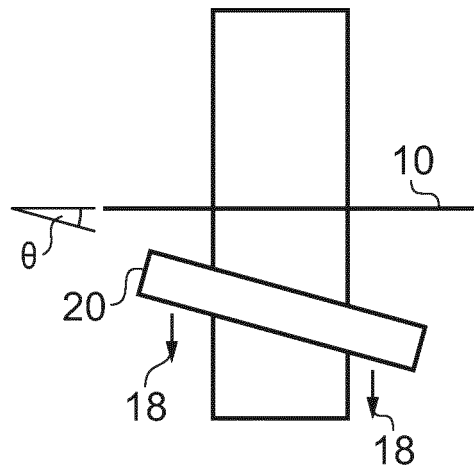


FIG. 3(b)



EUROPEAN SEARCH REPORT

Application Number
EP 12 18 5898

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	EP 0 924 028 A2 (ROLLS ROYCE PLC [GB]) 23 June 1999 (1999-06-23) * the whole document *	1-8	INV. B24B55/02 B24B55/03
X	EP 1 375 067 A1 (TOYODA MACHINE WORKS LTD [JP]) 2 January 2004 (2004-01-02) * figures 1-11 *	1-8	
X	EP 1 153 708 A1 (ROLLS ROYCE PLC [GB]) 14 November 2001 (2001-11-14) * the whole document *	1	
X	JP 2005 074580 A (TOYODA MACHINE WORKS LTD) 24 March 2005 (2005-03-24) * abstract *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			B24B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 24 June 2013	Examiner Koller, Stefan
CATEGORY OF CITED DOCUMENTS		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	
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			

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

EP 12 18 5898

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The members are as contained in the European Patent Office EDP file on
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24-06-2013

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0924028	A2	23-06-1999	AT	258838 T		15-02-2004
			DE	69821460 D1		11-03-2004
			DE	69821460 T2		25-11-2004
			EP	0924028 A2		23-06-1999
			GB	2332634 A		30-06-1999
			JP	H11254324 A		21-09-1999
			JP	2010005786 A		14-01-2010
			US	6123606 A		26-09-2000

EP 1375067	A1	02-01-2004	DE	60301373 D1		29-09-2005
			DE	60301373 T2		08-06-2006
			EP	1375067 A1		02-01-2004
			JP	3784349 B2		07-06-2006
			JP	2004017265 A		22-01-2004
			US	2003236059 A1		25-12-2003

EP 1153708	A1	14-11-2001	EP	1153708 A1		14-11-2001
			GB	2363746 A		09-01-2002
			US	2002025235 A1		28-02-2002

JP 2005074580	A	24-03-2005	JP	4182172 B2		19-11-2008
			JP	2005074580 A		24-03-2005
