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(54) **System for decorating ceramic supports**

(57) A machine for decorating supports (4) that comprises applying means (2, 4, 38, 38a, 38b, 102, 134, 136, 137, 144, 155, 158) arranged in order to apply decorating sheet means (18) to said supports (16) that are carried by a conveying line (14, 56), wherein said applying means (2, 4, 38, 38a, 38b, 102, 134, 136, 137, 144, 155, 158) cooperates with reference means (34) on said line suitable to maintain each support (16) in an applying station (102a, 103, 103a) while said applying means (102) press on it one said decorating sheet means (18) in order to cause it to adhere thereto.

A method for decorating already formed ceramic

supports (16), that comprises associating decorating sheet means (18) to an already formed ceramic support (16), said associating being carried out before sending to firing said support (16) associated to said decorating sheet means (18).

A method for decorating supports (16) applying thereto decorating sheet means (18) that comprises advancing said supports (16) along a direction (F, Y) and applying on each one of said supports (16) one said decorating sheet means (18) through motorized applying means (2, 4, 38, 38a, 38b, 102, 134, 136, 137, 144, 155, 158).

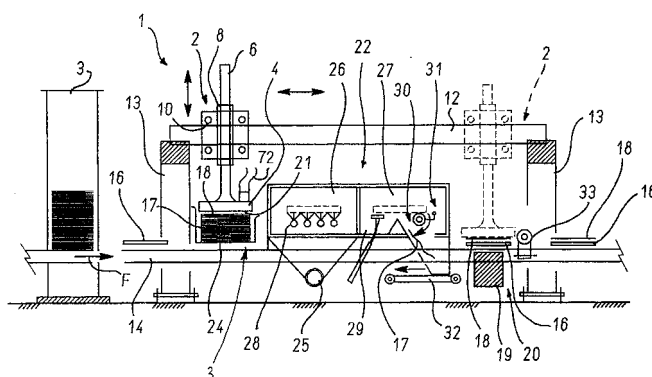


Fig. 1



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EUROPEAN SEARCH REPORT

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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 (Int.Cl.7)
X	DE 37 34 971 A (NETZSCH ERICH HOLDING) 27 April 1989 (1989-04-27)	1-4, 6, 11, 14-24, 27-31, 33-35	B65C1/02 B44C1/165 B65C9/36
Y	* the whole document *	5, 7, 8, 12, 13, 32, 36	
X	DE 89 10 057 U (KRONES AG) 12 October 1989 (1989-10-12)	1	
A	* page 6, line 11 - line 31; figures 1-3 *	16	
Y	US 3 960 633 A (GOSSIE MIJO A) 1 June 1976 (1976-06-01) * column 3, line 37 - line 61; figures 1, 9 *	12, 13, 36	
Y	US 4 612 078 A (KARP EDWARD C) 16 September 1986 (1986-09-16) * abstract; figure 1 *	5, 7, 8	
Y	GB 2 253 829 A (BERKEL LTD) 23 September 1992 (1992-09-23) * page 4, line 20 - page 5, line 3; figure 1 *	32	
A	US 4 239 570 A (KERWIN DANIEL) 16 December 1980 (1980-12-16)		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 3 July 2001	Examiner Müller, C
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 00 10 9887

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03-07-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 3734971 A	27-04-1989	NONE	
DE 8910057 U	12-10-1989	NONE	
US 3960633 A	01-06-1976	US 4026755 A	31-05-1977
US 4612078 A	16-09-1986	NONE	
GB 2253829 A	23-09-1992	NONE	
US 4239570 A	16-12-1980	AT 1374 T	15-08-1982
		DE 2963423 D	16-09-1982
		EP 0009739 A	16-04-1980
		JP 55055920 A	24-04-1980

EPO FORM P0459

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