



(19) Europäisches Patentamt
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(11)

EP 1 101 584 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
26.03.2003 Bulletin 2003/13

(51) Int Cl. 7: B28B 3/02, B28B 11/04,
B28B 7/00, B28B 11/00

(43) Date of publication A2:
23.05.2001 Bulletin 2001/21

(21) Application number: 00203852.9

(22) Date of filing: 03.11.2000

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR

Designated Extension States:
AL LT LV MK RO SI

(30) Priority: 15.11.1999 IT RE990116

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(54) Method for manufacturing tiles having their exposed side provided with depressions and reliefs to reproduce the appearance of split quarrystone

(57) The method comprises the following operations:

- in a usual mould, forming a crude tile from an atomized powder mix, that mould punch intended to create the exposed face of the tile reproducing the appearance of split quarrystone or of a non-flat surface;
- drying the thus formed tile in a continuous dryer in accordance with a usual drying cycle;

- applying on the exposed side of the dried tile at least one layer of coloured atomized clay or of pigment in powder form, to at least partly cover said side of the tile;
- subjecting the exposed side of the tile to the action of an air stream at an incidence angle tending towards zero;
- kiln-firing the tile treated in this manner in accordance with a usual firing cycle.

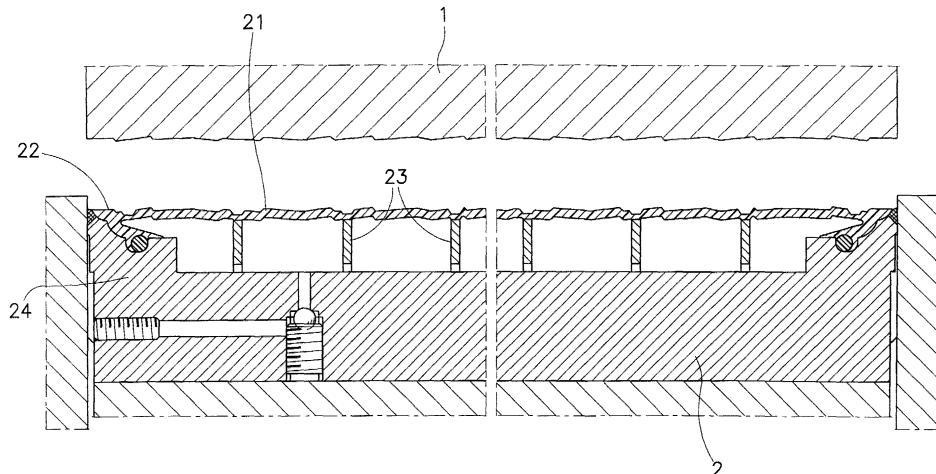


FIG.4



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EUROPEAN SEARCH REPORT

Application Number
EP 00 20 3852

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
E	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 26, 1 July 2002 (2002-07-01) & JP 2001 247387 A (INAX CORP), 11 September 2001 (2001-09-11) * abstract *---	1,9-11, 24-26	B28B3/02 B28B11/04 B28B7/00 B28B11/00
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 236 (C-1196), 6 May 1994 (1994-05-06) -& JP 06 024874 A (NATL HOUSE IND CO LTD), 1 February 1994 (1994-02-01) * abstract *-& DATABASE WPI Week 199409 Derwent Publications Ltd., London, GB; AN 1994-071765 XP002223309 & JP 06 024874 A (NATL HOUSE IND CO LTD), 1 February 1994 (1994-02-01) * abstract *---	1,9 24-26	
X	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 09, 31 October 1995 (1995-10-31) & JP 07 144981 A (INAX CORP), 6 June 1995 (1995-06-06) * abstract *---	1	B28B C04B
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 164 (M-1390), 30 March 1993 (1993-03-30) & JP 04 327644 A (TOTO LTD), 17 November 1992 (1992-11-17) * abstract *---	1	
X		24	
		-/-	
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search		Examiner
THE HAGUE	6 December 2002		Orij, J
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone	T : theory or principle underlying the invention		
Y : particularly relevant if combined with another document of the same category	E : earlier patent document, but published on, or after the filing date		
A : technological background	D : document cited in the application		
O : non-written disclosure	L : document cited for other reasons		
P : intermediate document	& : member of the same patent family, corresponding document		

**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:

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:

1-17, 24-27



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)
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 11, 26 December 1995 (1995-12-26) & JP 07 195027 A (ONODA AUTOCLAVED LIGHT WEIGHT CONCRETE CO LTD), 1 August 1995 (1995-08-01) * abstract * -----	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	6 December 2002	Orij, J	
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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LACK OF UNITY OF INVENTION
SHEET B

Application Number

EP 00 20 3852

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: 1-17, 24-27

glaze decorating surfaces and tiles obtained

2. Claims: 18-23

pressing tiles with two irregular faces

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

EP 00 20 3852

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-12-2002

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2001247387 A	11-09-2001	NONE	
JP 06024874 7 A	09-12-1985	JP 1902719 C JP 4058498 B	08-02-1995 17-09-1992
JP 07144981 7 A		NONE	
JP 04327644 7 A		NONE	
JP 07195027 7 A		NONE	