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(54) **Airless spray-coating of a surface with a viscous aqueous architectural coating composition**

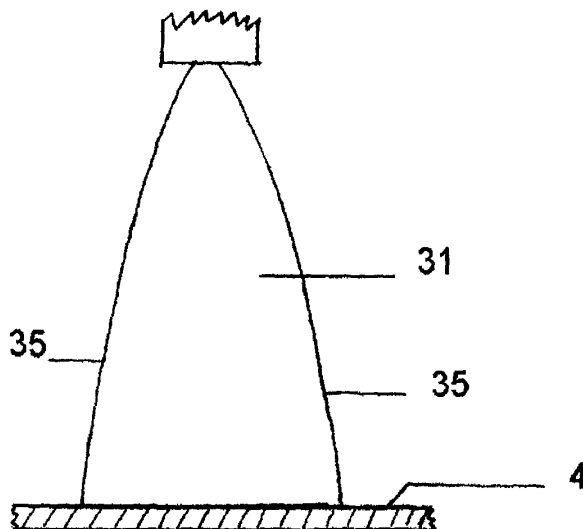
(57) A process for the airless spray-coating of a surface with a viscous aqueous non-Newtonian architectural coating composition wherein the composition contains a preferably associative thickener and is subjected to a pressure of from 2.5 to 5 bar generated preferably by hand-operated compressor and then sprayed from a preferably slot-shaped outlet orifice (52) in a nozzle (50) to produce an outflow (31) of composition having boundaries (35) which diverge at least until it has formed a front of at least 30mm in width. The composition preferably

has a Brookfield viscosity of at least 0.5 pa.sec and a solids content of 7 wt %.

Also apparatus for performing the process comprising a container containing the coating composition together with a nozzle having an outlet orifice, a hand-operated compressor and a pressure release valve actuable in the pressure range 2.5 to 5 bar and preferably an auxiliary orifice upstream of the outlet orifice.

The process and apparatus enable the viscous compositions to be applied quickly using low pressures easily generated by a hand compressor.

FIG. 3





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EUROPEAN SEARCH REPORT

Application Number
EP 05 07 6856

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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X	US 6 168 093 B1 (GREER, JR. LESTER R ET AL) 2 January 2001 (2001-01-02) * the whole document *	13-19	TECHNICAL FIELDS SEARCHED (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 24 February 2006	Examiner Connor, M
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	

2
EPO FORM 1503 03.82 (P04C01)

**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:



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: 1-12

method for airless spray coating of a surface with a composition comprising thickener, pigment, and additive (out of a list), wherein:

(a) the composition is subjected to a pressure of 2-5 bar;
and

(b) the outflow has non-convergent boundaries at least until the fan is 30 mm in width.

2. claims: 13-19

apparatus for the airless spray coating of a surface comprising a container containing a composition comprising thickener, pigment, and additive (out of a list), comprising:

(a') a compressor and pressure release valve for releasing a pressure of 2.5-5.0 bar; wherein

(c) the compressor is hand operatable.

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

EP 05 07 6856

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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