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Collins et al.

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(54) **PRINT METHODOLOGY FOR APPLYING POLYMER MATERIALS TO ROOFING MATERIALS TO FORM NAIL TABS OR REINFORCING STRIPS**

(76) Inventors: **David Allan Collins**, 11302 Memorial Dr., Houston, TX (US) 77024; **George William Jackson**, 3100 Walnut Bend, #222, Houston, TX (US) 77042; **Miguel E. Madero O'Brien**, Sierra Amatepec 371, Lomas de Chapultepec, Mexico, D.F. (MX) 11000

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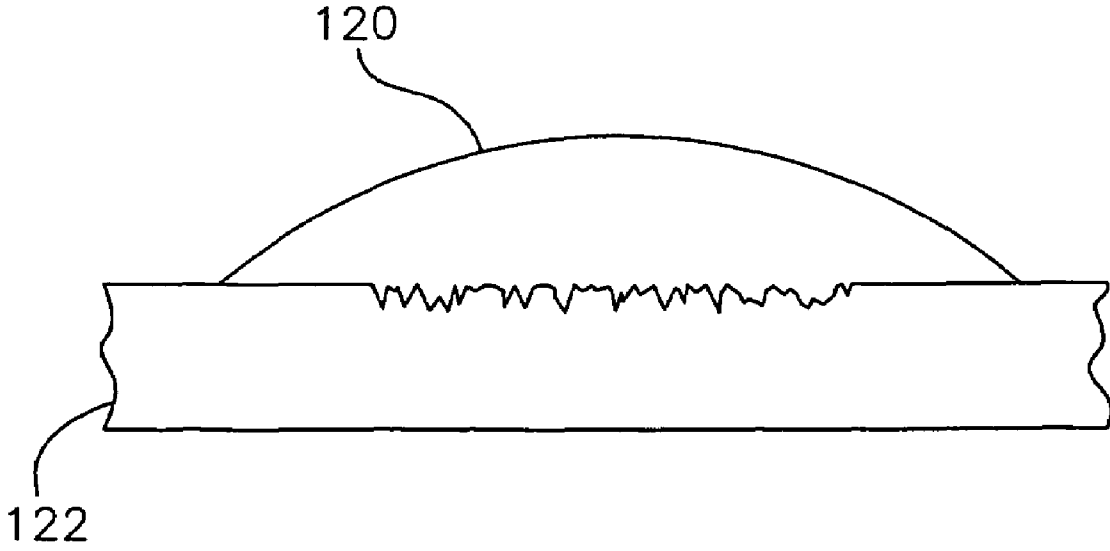
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B32B 7/12 (2006.01)

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(58) **Field of Classification Search** 52/746.11; 427/186–188, 428.18–428.2; 428/141, 98, 428/172, 195.1, 201, 213–214, 343, 345–346

See application file for complete search history.

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Primary Examiner—David R Sample
Assistant Examiner—Prashant J Khatri

(57) **ABSTRACT**

A method of making a composite roofing material and the resulting material by depositing nail tabs made of a thermoplastic, thermosetting, adhesive or elastomer material, in a liquid state, onto the base substrate of the composite roofing material or onto the saturated or coated roofing material, or onto a transfer surface to be pressed or laminated onto the roofing material. A preferred embodiment transfers the nail tabs onto an engraved transfer impression roll and uses a pressurized applicator to inject the viscous tab material into engraved patterns depressed in raised areas of the impression roll., then deposits the material onto the roofing material. A preferred embodiment also includes the thermoplastic or thermosetting material in a liquid or viscous state hardened or cured by either its exposure to the air or by the use of ultraviolet or visible light.
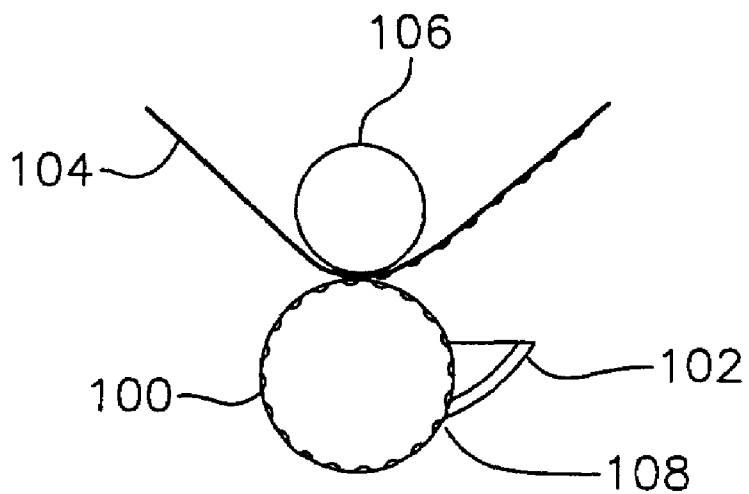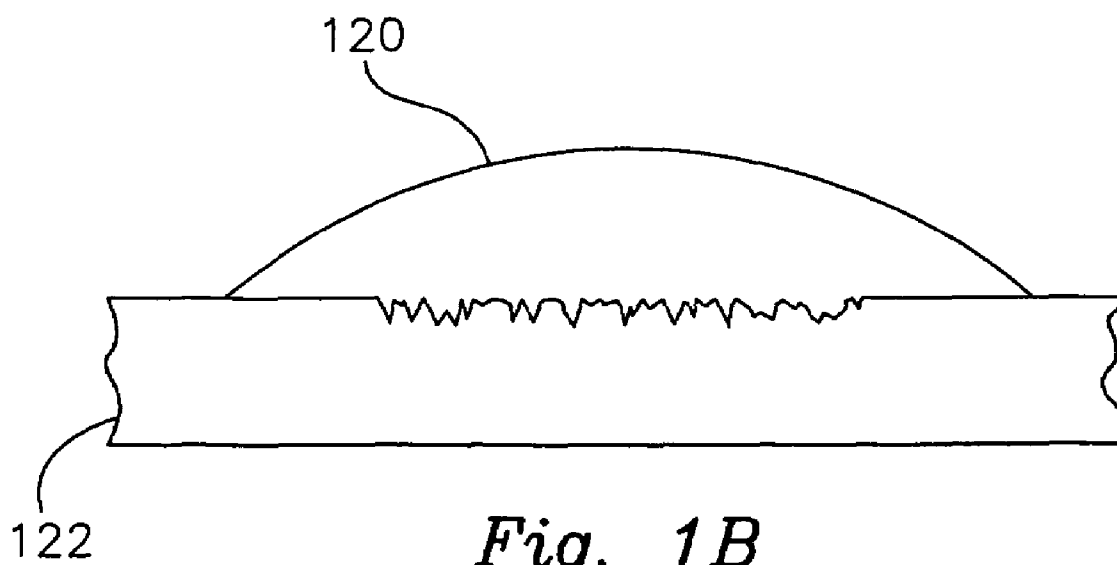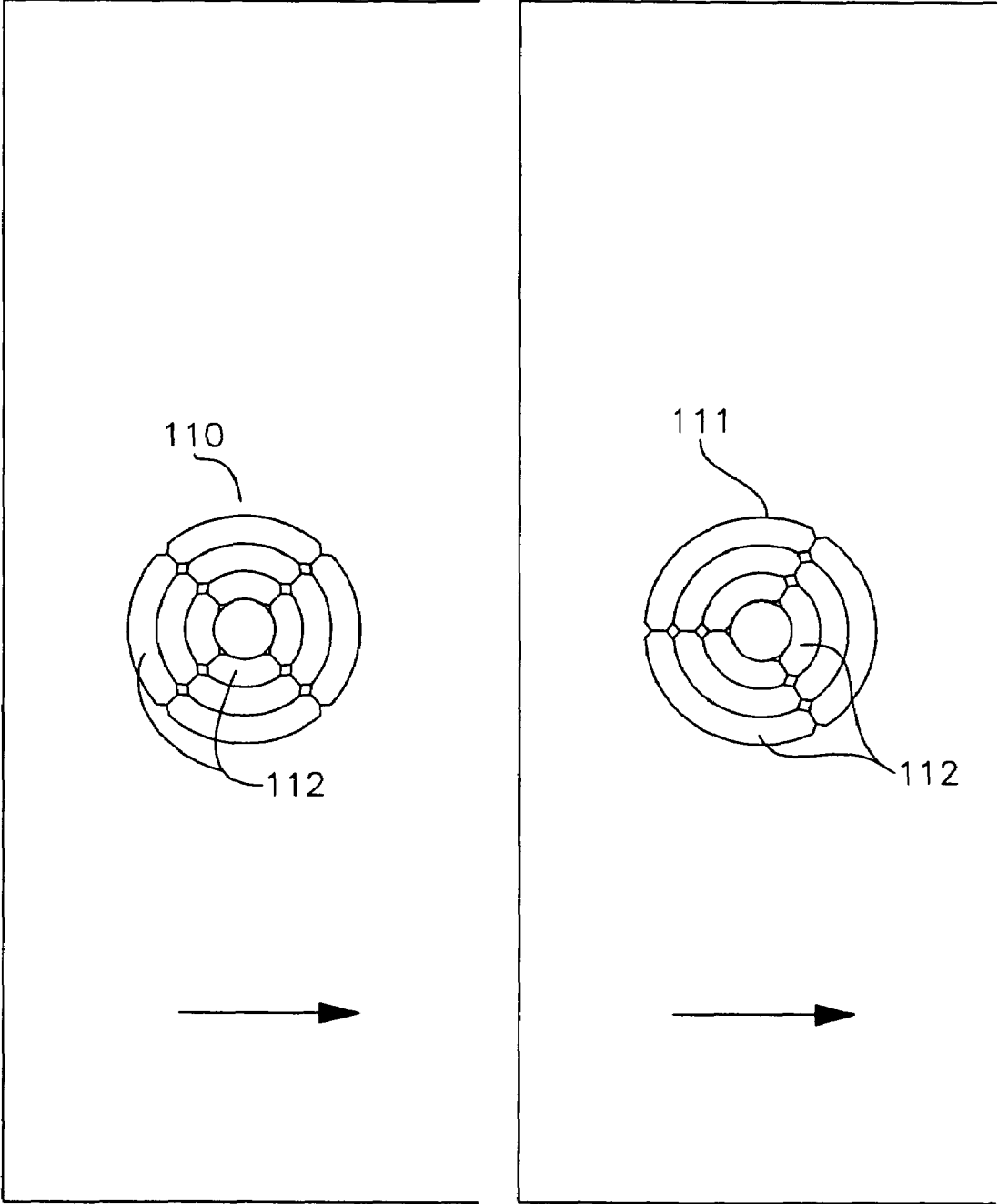
7 Claims, 10 Drawing Sheets

106

104

100

102

108

Fig. 1

120

122

Fig. 1B

Fig. 1A

Fig. 2

Fig. 3

DOCKET ALARM
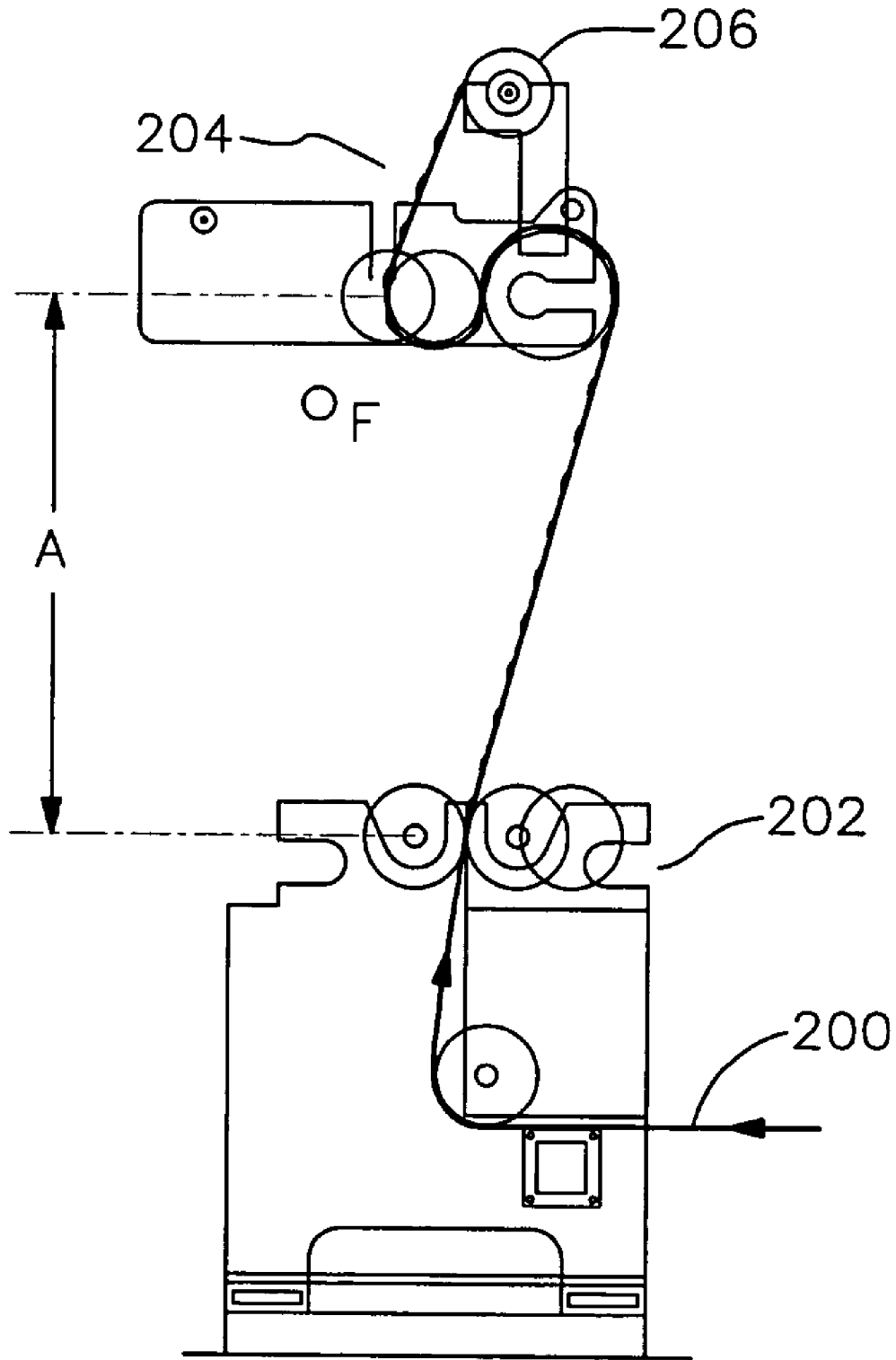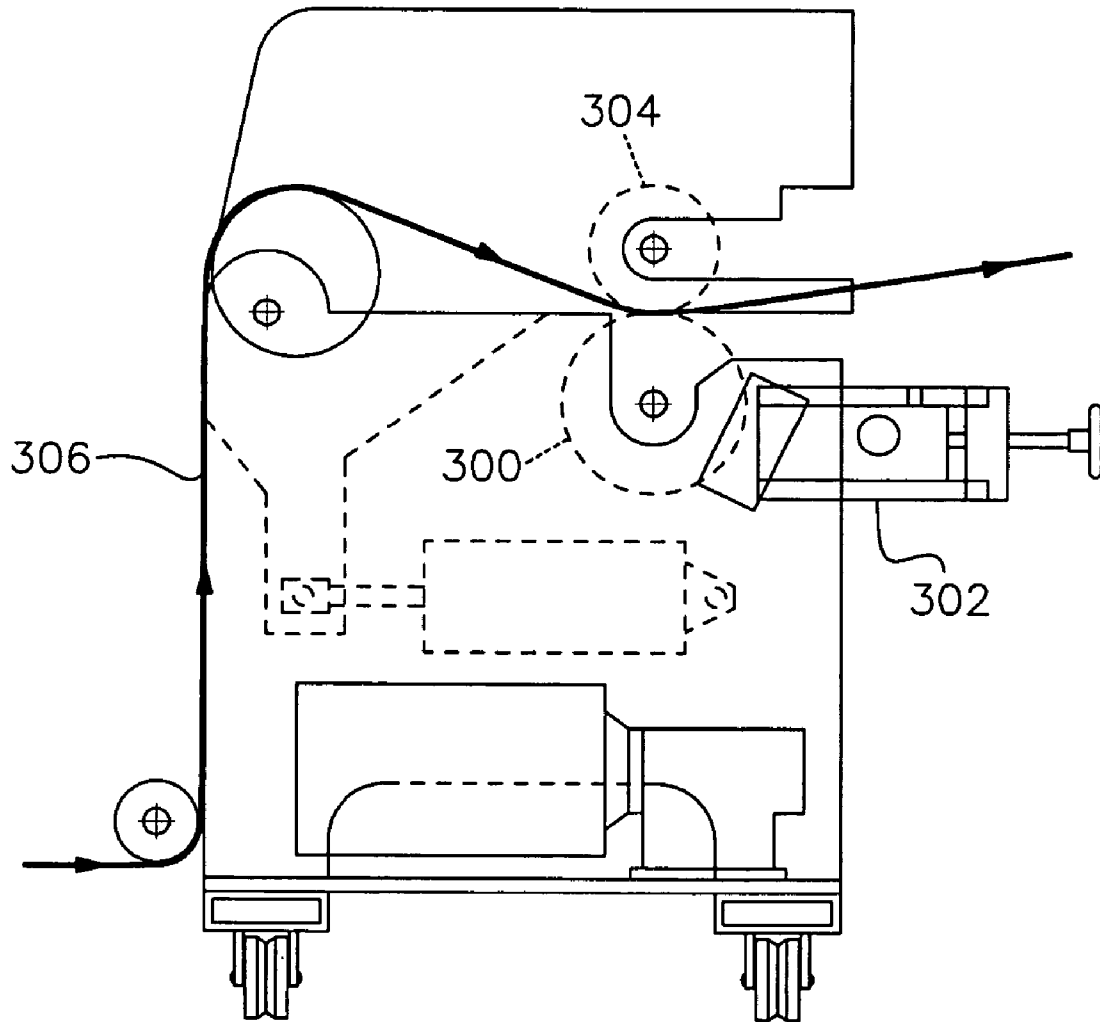
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