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(54) Title: PROCESS FOR DECARBONATING CARBONATED MATERIALS AND DEVICE THEREFOR

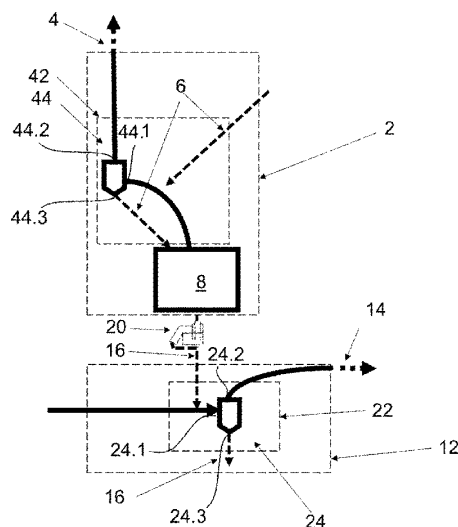


FIG. 1A

(57) Abstract: The present invention relates to a process for the decarbonation of limestone, dolomite or other carbonated materials, comprising the following steps: - heating particles of carbonated materials (6) in a reactor (8) of a first circuit (2) to obtain decarbonated particles (16); - conveying particles of carbonated materials (6) by a first entraining gas (4) in the first circuit (2) for preheating, said gas (4) comprising said carbon dioxide, said gas composition being substantially free of nitrogen; - separating the carbonated particles (6) from a first entraining gas (4) flow; - transferring the decarbonated particles (16) to a cooling section (22) of a second circuit (12) comprising a second entraining gas (14) in which the conveyed decarbonated particles (16) release a portion of their thermal energy; - separating the decarbonated particles (16) from a second entraining gas (14) flow; wherein said second entraining gas (14) is substantially free of carbon dioxide, and the device thereof.

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