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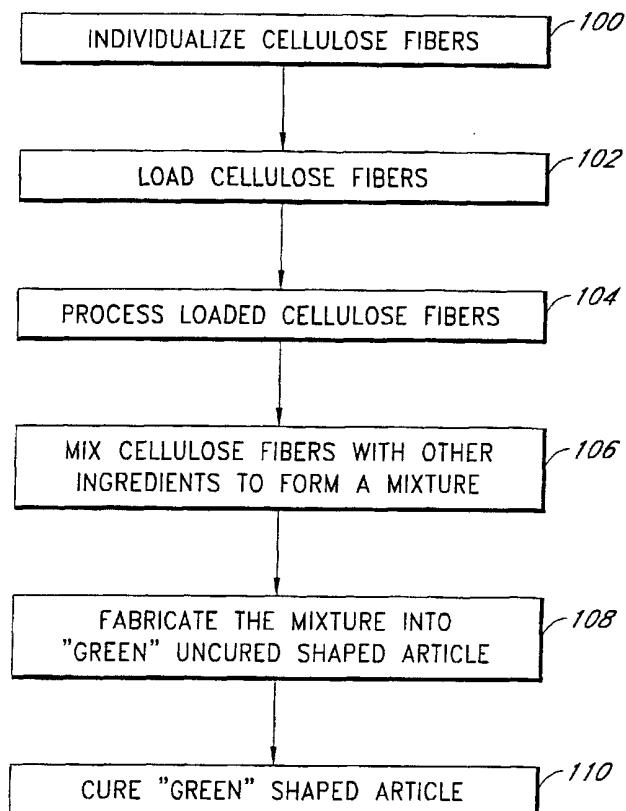
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(54) Title: FIBER CEMENT COMPOSITE MATERIALS USING CELLULOSE FIBERS LOADED WITH INORGANIC AND/OR ORGANIC SUBSTANCES



(57) Abstract: This invention discloses a new technology related to cellulose fiber reinforced cement composite materials using the loaded cellulose fibers. This invention discloses four aspects of the technology: fiber treatment; formulation; method and final product. This technology advantageously provides fiber cement building materials with the desirable characteristics of reduced water absorption, reduced rate of water absorption, lower water migration, and lower water permeability. This invention also impart the final products improved freeze-thaw resistance, reduced efflorescence, reduced chemical dissolution and re-deposition, and improved rot and fire resistances, compared to conventional fiber cement products. These improved attributes are gained without loss in dimensional stability, strength, strain or toughness.



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# INTERNATIONAL SEARCH REPORT

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PCT/US 01/42243

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C04B28/02 C04B18/24 D21H17/70

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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