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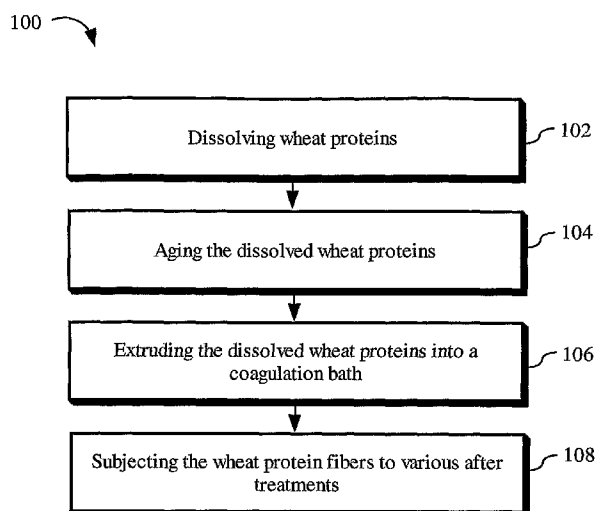
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[Continued on next page]

(54) Title: PROCESS FOR THE PRODUCTION OF HIGH QUALITY FIBERS FROM WHEAT PROTEINS AND PRODUCTS MADE FROM WHEAT PROTEIN FIBERS



(57) Abstract: The present invention provides new fibers manufactured from wheat proteins, and a method and kit for their production. The method includes dissolving one or more wheat proteins in at least one of an alkali, acid, alcohol, reducing agent, amino acid, chemical additive, or salt in ratios between about 0.5 percent and about 50 percent by weight. A spinnable solution is obtained by aging the dissolved wheat proteins at temperatures from about minus thirty degrees Celsius (-30 C) to about one hundred and fifty degrees Celsius (150 C) for approximately one to eighty hours. The dissolved wheat proteins are extruded into a coagulation bath including at least one of an alkali, acid or salt to precipitate the wheat protein fibers. Wheat protein fibers produced according to this invention are intended to be used for textiles such as apparel, carpets and home furnishings, medical and automotive textiles, composites and other fibrous applications.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/20430

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8)- D06M 23/00 (2007.01)

USPC- 8/116.1, 8/125

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)

IPC (8): D06M 23/00 (2007.01)

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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 practicable, search terms used)

West DB=PGPB,USPT,USOC,EPAB,JPAB

Keywords used: wheat protein, protein fibers, dissolve\$, extrud\$, linen fiber, ultraviolet, linen fabric, thermal, heat, solubiliz\$, precipitate, curing, dissolving, curing, solubilizing.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2,992,933 A (BESSO et al.) 18 July 1961 (18.07.1961), entire document, especially col 1, ln 10-15; col 2, ln 6-18 and 25-35; col 2, ln 72 to col 3, ln 12 and 66-73; col 4, ln 20-29 and 63-65; col 5, ln 21 and ln 26-29; and col 6, ln 10-24.	1-2, 4-6, 8-15 and 17
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Y		3, 7 and 16
Y	US 2004/0102614 A1 (ISLAM et al.) 27 May 2004 (27.05.2004), para [0149] and [0150].	3, 7 and 16



Further documents are listed in the continuation of Box C.



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document member of the same patent family

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