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(54) Title: METHOD FOR SPINNING AND WASHING ARAMID FIBER AND RECOVERING SULFURIC ACID

(57) Abstract: The invention pertains to a method for spinning and washing aramid fiber and for recovering sulfuric acid, using a spinning unit and a sulfuric acid recovery unit, comprising the steps: a) spinning an aramid polymer from a sulfuric acid spin dope to a yarn and coagulating the yarn in a coagulation bath having an inlet for water or diluted sulfuric acid and an outlet for sulfuric acid enriched water; b) washing the yarn with water to obtain washed yarn and washing water containing 0.5-20 wt.% sulfuric acid; c) recycling the sulfuric acid enriched water and optionally the washing water to the sulfuric acid recovery unit; d) increasing the sulfuric acid content of the recycled sulfuric acid enriched water, and optionally the washing water, by evaporation to obtain 20 to 98% sulfuric acid and water; e) mixing the 20 to 98% sulfuric acid with oleum to obtain 98-105% sulfuric acid; f) recycling the 98-105% sulfuric acid to the spinning unit for use as sulfuric acid spin dope.

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. D01F13/04 D01F6/60

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)
D01F

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)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 021 484 A (AKZO NV [NL]) 7 January 1981 (1981-01-07) page 1, line 3 - line 18 page 9, line 22 - page 10, line 8	1-9
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A	EP 0 168 879 A (AKZO NV [NL]) 22 January 1986 (1986-01-22) page 4, line 7 - line 29 page 25	1-9

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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