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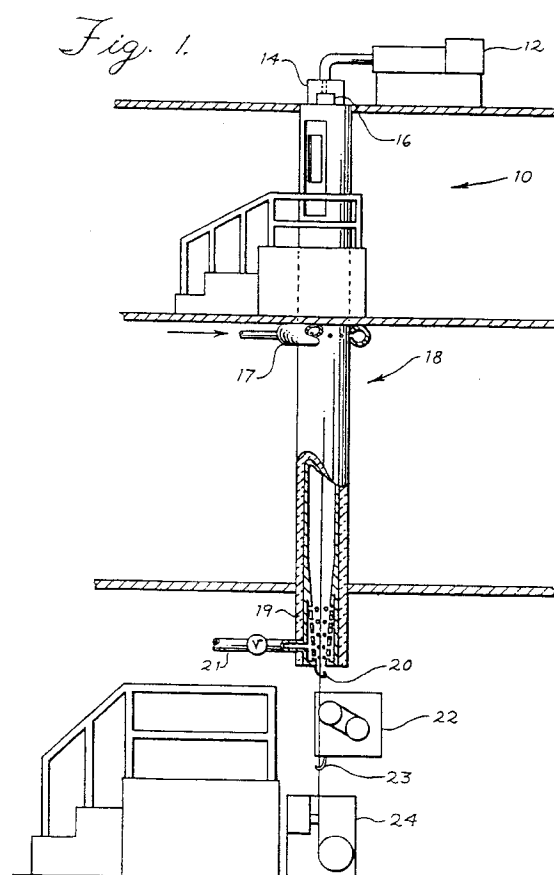
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A spinning process for producing high strength, high modulus, low shrinkage synthetic yarns.

A process for spinning an organic synthetic melt spinnable polymer is disclosed herein. The process includes the steps of: extruding the polymer through a spinneret (16); passing the filaments from the spinneret through an elongated zone (18); maintaining the filaments at a temperature above the glass transition temperature of the polymer within the zone; and thereafter converging the filaments. Alternatively, the process includes the steps of: extruding the polymer through a spinneret; providing an elongated zone having a length of at least 5 meters or means for controlling the temperature within said zone from a predetermined maximum to a predetermined minimum; passing the filaments through the zone; and thereafter converging the filaments.





European Patent
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EUROPEAN SEARCH REPORT

Application Number

EP 91 30 4190

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|--|---|--|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. Cl.5) |
| X | US-A-3 053 611 (WOLFGANG GRIEHL) * column 1, line 61 - column 2, line 52; claims; examples * --- | 1-7, 10-12, 15, 16 | D01D5/092 D01F6/62 D01F6/60 |
| A | EP-A-0 341 920 (TORAY INDUSTRIES INC.) * claim 5 * --- | 1-16 | TECHNICAL FIELDS SEARCHED (Int. Cl.5) D01D D01F |
| D,A | US-A-4 491 657 (ISOO SAITO) * claim 2 * --- | 1-16 | |
| A | EP-A-0 034 880 (IMPERIAL CHEMICAL INDUSTRIES LTD) * claim 1 * --- | 1-16 | |
| A | PATENT ABSTRACTS OF JAPAN vol. 7, no. 139 (C-171)(1284) 17 June 1983 & JP-A-58 054 020 (TEIJIN KK) 30 March 1983 * abstract * --- | 1-16 | |
| A | WORLD PATENTS INDEX Week 8013, Derwent Publications Ltd., London, GB; AN 80-22821C & JP-A-55 022 012 (TORAY IND INC) 16 February 1980 * abstract * --- | 1-16 | |
| A | WORLD PATENTS INDEX Week 7950, Derwent Publications Ltd., London, GB; AN 79-90510B & JP-B-54 038 213 (TEIJIN KK) 20 November 1979 * abstract * ----- | 1-16 | |
| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 27 JANUARY 1992 | Examiner TARRIDA TORRELL J. B. |
| CATEGORY OF CITED DOCUMENTS | | T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document | |
| X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document | | | |

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