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- Pitch for carbon fibers, process for production of said pitch, and process for production of carbon fibers using said pitch.
- (57) The present invention relates to a process for producing pitch for use in production of carbon fiber which comprises subjecting a pitch starting material nto a first stage heat treatment at a temperature of ₹380 to 500°C under a pressure of 1 to 1,500 mmHg and then to a second stage heat treatment at a temperature of 450 to 550 °C under a pressure of -0.1 to 20 mmHg, wherein the pitch starting material has a number average molecular weight of 300 to 500, weight average molecular weight/number average molecular weight of 1.5/1 to 2.2/1, a boiling point of at least 450 °C, a residue content as determined by heating up to 800°C in nitrogen gas at a rate of 10°C per minute of not more than 5% by weight, and a peak area at the starting point as determined by developing on a silica gel thin layer with a mixed

solvent of 95% by volume of dichloromethane and 5% by volume of methyl alcohol of not more than 1%.

The present invention further relates to novel pitch for use in production of carbon fibers as obtained by the above process and a process for producing carbon fibers using said pitch. According to the present invention, the pitch capable of providing carbon fibers having a high tensile strength and a high knot strength can be obtained.

## European Patent Office

## **EUROPEAN SEARCH REPORT**

EP 90 10 0420

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ategory	Citation of document with inc of relevant pass	lication, where appropriate, sages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 5)	
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Place of search THE HAGUE		Date of completion of the search 30-08-1990	ROTSAERT L.D.C.		
CATEGORY OF CITED DOCUMENTS  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		E : earlier paten after the filin ther D : document cit L : document cit	<ul> <li>T: theory or principle underlying the invention</li> <li>E: earlier patent document, but published on, or after the filing date</li> <li>D: document cited in the application</li> <li>L: document cited for other reasons</li> </ul>		
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