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Abstract (en)

[origin: WO2018234126A1] The invention relates to a furnace (10) for thermal treatment, in particular for carbonization and/or graphitization, of material, in particular fibers (12), in particular fibers (14) of oxidized polyacrylonitrile PAN. During the thermal treatment, a pyrolysis gas is released from the material. The furnace (10) comprises a housing (16), a process space (22), which is located in the interior (18) of the housing (16) and is delimited by a process space housing (24) and through which the material can be fed, a heating system (32), by means of which a process space atmosphere (30) prevailing in the process space (22) can be heated, and an extraction system (48), by means of which process space atmosphere (30) laden with pyrolysis gas can be suctioned from the process space (22). The extraction system (48) has at least one suction device (52) having a suction channel (60), which is delimited by a channel wall (58) and which is connected to the process space (22) by means of a suction opening (62). The suction opening (62) is arranged in a region (68) of the process space (22) in which, during operation of the furnace (10), a temperature prevails at which no or only moderate chemical reactions occur between the pyrolysis gas and the process space housing (24) and/or the channel wall (58).

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