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(54) **Method and apparatus for cooling a strip with a cooling roll**

(57) The invention relates to a method and an apparatus for cooling a flexible strip, wherein the strip (1) is brought in contact with at least one rotating cooling roll (2;102;202) for transferring heat from the strip (1) to the wall (2a,102a,202a) of said cooling roll, the cooling roll having an interior space (3;103;203) at a predetermined pressure. According to the invention, the interior space comprising at least one evaporation zone (EZ) containing a cooling medium in a liquid state, wherein the temper-

ature of said liquid cooling medium is substantially the temperature of the liquid/gas phase change of that cooling medium at the predetermined pressure, such that the liquid cooling medium is partially evaporated by the heat received from the strip (1) via the cooling roll wall. The surface of said interior space comprises a holder for holding the cooling medium in the evaporation zone, wherein said holder comprises porous material or wick, having a capillary function.

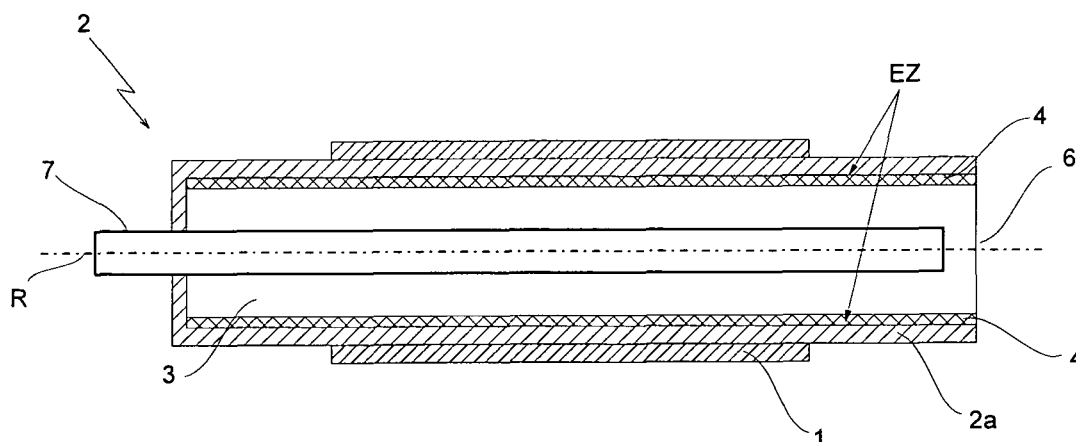


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		8 October 2009	Rischard, Marc
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 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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 07 00 7266

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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