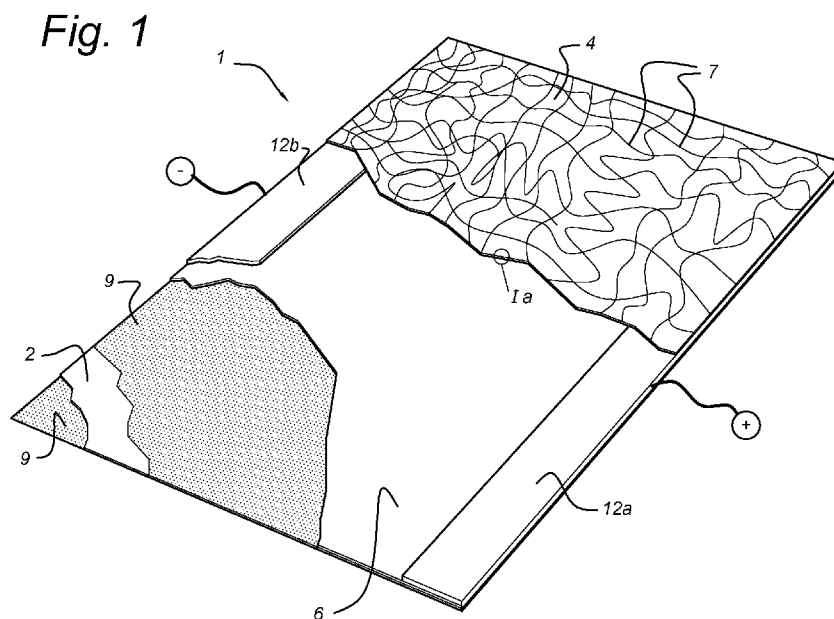




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(57) Abstract: A device is disclosed for extracting water vapour from a fluid stream. The device comprises a carrier structure, a substrate of fibrous material provided on the carrier structure, the fibrous material comprising a plurality of individual fibres, a quantity of an LCST polymer coating the individual fibres; and a heating provision arranged to selectively heat the LCST polymer to above its lower critical temperature whereby water absorbed by the fibres can be subsequently released on heating. By providing the LCST polymer as a coating onto the fibres, an increased surface area may be achieved.