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(54) **MICROSTRUCTURED SURFACE FILM ASSEMBLY FOR LIQUID ACQUISITION AND TRANSPORT**

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(57) **ABSTRACT**

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A film or tape has one of its major surfaces defined by microstructured features including a plurality of channels defined by spaced apart protrusions. The microstructured film is able to acquire liquids and to control the directional transport of such liquids for subsequent removal therefrom. The transport can be passive or active (i.e., caused or enhanced by an applied potential). The inventive microstructured films and tapes have applications in laminate floor assemblies (for spill removal) and industrial articles such as computer keyboards and other devices and assemblies that benefit from fluid removal. The invention also has application in evaporative and condensation applications. In one embodiment, at least one cross-channel is formed on the microstructured surface to join adjacent channels for liquid flow therebetween.

(73) Assignee: **3M Innovative Properties Company**

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