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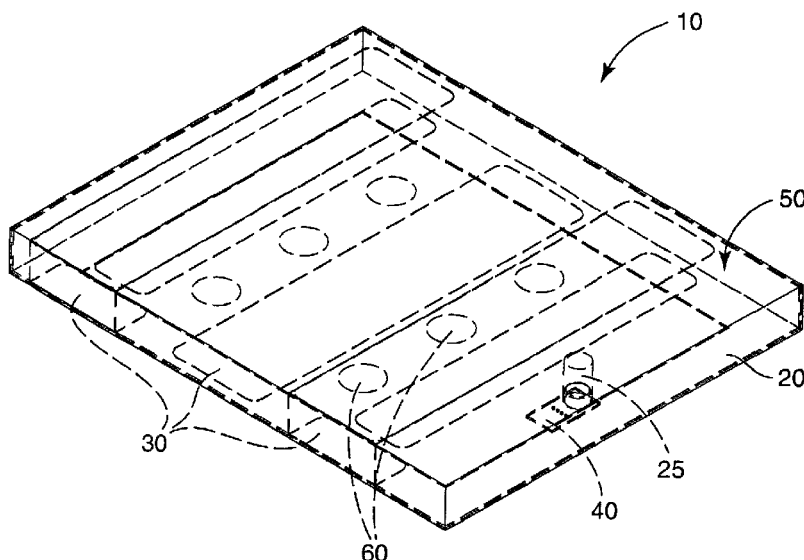
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- (71) Applicant: **3M INNOVATIVE PROPERTIES COMPANY** [US/US]; 3M Center, Post Office Box 33427, Saint Paul, MN 55133-3427 (US).
- (72) Inventors: **HOISINGTON, Mark, A.**; 6801 River Place Boulevard, Austin, TX 78726-9000 (US). **MAHONEY, David, V.**; 6801 River Place Boulevard, Austin, TX 78726-9000 (US).
- (74) Agents: **FONSECA, Darla, P.** et al.; Office of Intellectual Property Counsel, Post Office Box 33427, Saint Paul, MN 55133-3427 (US).
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(54) Title: BREATHABLE MOISTURE BARRIER FOR AN OCCUPANT SENSING SYSTEM



(57) Abstract: A breathable moisture barrier suitable for use in enclosing flexible electrodes, foam substrate and other electrical components within a substantially liquid impervious environment without significantly impairing the ability of electrical sensors to accurately measure temperature and humidity variations within the surrounding environment such as the seating compartment of an automobile. It is further disclosed that a breathable polymeric material having a sufficiently high moisture vapor transmission rate (MVTR) will permit water vapor to be transported across the barrier and quickly reach equilibrium within the enclosed seat sensor mat assembly and to allow the humidity compensation of the occupant sensing system to function correctly. The breathable moisture barrier of the present invention provides a sufficiently high MVTR to allow rapid humidity equilibration within the sensor mat so as to better track rapid changes in the passenger compartment environmental conditions upon starting the car and applying either air conditioning or heating.



WO 03/043858 A1

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations*
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