

Title (en)  
AEROGEL AND METHOD OF MANUFACTURING SAME

Title (de)  
AEROGEL UND HERSTELLUNGSVERFAHREN

Title (fr)  
AEROGEL ET SON PROCEDE DE FABRICATION

Publication  
**EP 1919829 A2 20080514 (EN)**

Application  
**EP 06813666 A 20060822**

Priority  

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Abstract (en)  
[origin: WO2007024925A2] An ambient pressure, low cycle time method for the synthesis and manufacture of a low cost, highly insulating, highly translucent, and low density transition metal-based hydrophilic and hydrophobic nanogel. The important aspects are the method of synthesis, the stage of imparting hydrophobicity, and the process of manufacture. The method comprises the steps of mixing a chilled precursor solution with a chilled catalyst solution such that the mixture has a pH of between 9.5 and 12.2. The mixture is maintained at a temperature of 34°F-55°F for between 1 and 120 minutes to form a gel. The gel is silated the gel for about 120 minutes, washed in a wash fluid, then dried and annealed to form the aerogel.

IPC 8 full level  
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