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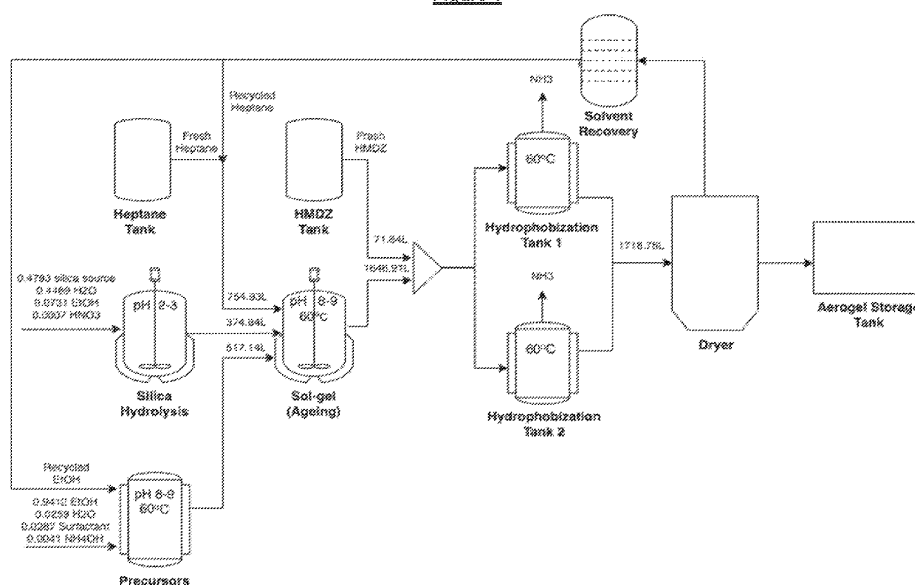
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(54) Title: A METHOD OF FORMING AN AEROGEL MATERIAL

Figure 1



(57) **Abstract:** There is provided a method of making an alkoxy silicate-based aerogel material, the method comprising: hydrolysing an alkoxy silicate in a hydrolytic solvent to form a silica sol for a pre-determined period of time and at a pH of 1-4; mixing the silica sol with a basic solution to form a sol-gel; a first ageing the sol-gel; adding a surface-modifying agent to the sol-gel; a second ageing the sol-gel; and heating the sol-gel at a temperature of 120-250°C to form the alkoxy silicate-based aerogel material, wherein the alkoxy silicate-based aerogel material has a thermal conductivity of < 18 mW/mK. There is also provided an alkoxy silicate-based aerogel material formed from the method.

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