

11

21. The method of claim 13, further including the step of adding a diluent to change the viscosity of the siloxane mixture.
22. The method of claim 13, wherein the step of dispersing includes adding a sintering aid to the siloxane mixture. 5
23. The method of claim 13, where said step of dispersing further include dispersing a material produced by committing the product of the step of foaming.
24. A porous catalyst produced by the method of claim 13.
25. A porous catalyst produced by the method of claim 23. 10
26. The method of claim 13, wherein the hydroxide and the hydride functional siloxane are combined in a ratio of about 1:1 by weight.
27. The method of claim 26, wherein the hydroxide and hydride functional siloxanes consist essentially of hydroxyl terminated polydimethylsiloxane and polymethylhydrosiloxane-polydimethylsiloxane copolymer. 15
28. The method of claim 13, wherein the step of foaming further includes the step of adjusting the temperature of the suspension to control the rate of foam formation. 20
29. The method of claim 13 further including the step of adding a diluent to change the viscosity of the siloxane mixture.
30. The method of claim 13, wherein the step of dispersing includes adding a sintering aid to the siloxane mixture. 25
31. A porous foam having multiple components, said foam produced by the method of claim 13, wherein said step of repeating includes adding one or more additional com-

12

- ponents selected from the list consisting of powdered metals, ceramics, metal salts, and combinations thereof.
32. A method for preparing a porous sintered body, comprising the steps of:
- a) dispersing at least one powdered material into a liquid siloxane mixture to form a uniform liquid suspension, said mixture consisting essentially of a hydroxy terminated polydimethylsiloxane and polymethylsiloxane-polydimethylsiloxane copolymer, wherein said powdered material is selected from the group comprising metals, ceramics, metal salts, and combinations thereof;
 - b) mixing said uniform liquid suspension together with said polymerization catalyst, said catalyst causing said siloxane mixture to initiate a crosslinking reaction while simultaneously liberating hydrogen gas, said gas causing said liquid suspension to foam, said crosslinking reaction forming a solid polymer body, wherein said solid polymer body is a closed cell foam structure having the powdered material uniformly dispersed therein; and
 - c) heating the solid polymer body in a reducing atmosphere above 600° C. to form said porous sintered body.

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