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(21) International Application Number: PCT/US96/10168 (22) International Filing Date: 3 June 1996 (03.06.96) (30) Priority Data: 08/484,727 7 June 1995 (07.06.95) US (71) Applicant: THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors: DESMARAIS, Thomas, Allen; 10204 Scull Road, Cincinnati, OH 45252 (US). DYER, John, Collins; 3760 Sherbrooke Drive, Cincinnati, OH 45241 (US). (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>													
(54) Title: FOAM MATERIALS FOR INSULATION, DERIVED FROM HIGH INTERNAL PHASE EMULSIONS (57) Abstract The present invention relates to compressible polymeric foam materials useful as insulation. These polymeric foams are prepared by polymerization of certain water-in-oil emulsions having a relatively high ratio of water phase to oil phase, commonly known as "HIPEs". The polymeric foam materials comprise a generally hydrophobic, flexible or semi-flexible, non-ionic polymeric foam structure of interconnected open-cells. The foam structures have: (a) a specific surface area per foam volume of at least about 0.01 m²/cc; (b) an expanded density of less than about 0.05 g/cc; and (c) a ratio of expanded to compressed thickness of at least about 3:1; wherein when the foam is compressed to 33 % of its original expanded thickness and is thereafter maintained without artificial restraint on its surface, said foam will reexpand by no more than 50 % after 21 days at ambient temperature (22 °C). In a preferred embodiment, the foams of the present invention, when heated to their T_g or higher, will reexpand to 90 % of their original thickness within about 1 day or less. The invention also relates to a process for making the compressible polymeric foam material comprising polymerizing a water-in-oil emulsion having a volume to weight ratio of water phase to oil phase in the range of from about 20:1 to about 250:1.														
<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">REPLACED SHEETS</td> <td style="padding: 5px;">SG</td> </tr> <tr> <td style="padding: 5px;">☐ Description : paged to paged</td> <td></td> </tr> <tr> <td style="padding: 5px;">☒ Claim(s) : paged 21... to paged 31....</td> <td></td> </tr> <tr> <td style="padding: 5px;">☐ Drawing(s) : paged to paged</td> <td></td> </tr> <tr> <td style="padding: 5px;">☐ Abstract : paged to paged</td> <td></td> </tr> <tr> <td colspan="2" style="padding: 5px;">DATE OF RECEIPT</td> </tr> </table>			REPLACED SHEETS	SG	☐ Description : paged to paged		☒ Claim(s) : paged 21... to paged 31....		☐ Drawing(s) : paged to paged		☐ Abstract : paged to paged		DATE OF RECEIPT	
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