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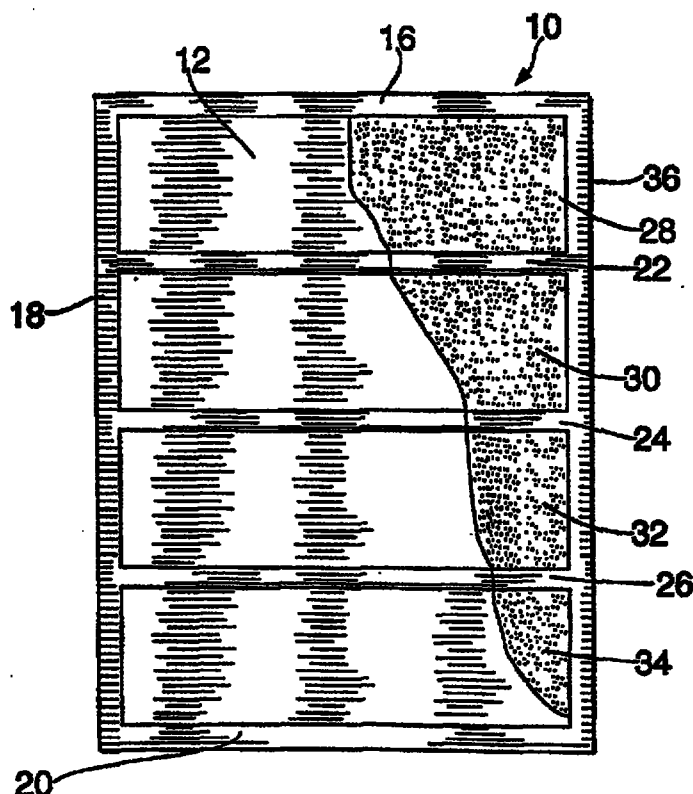
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(21) International Application Number: PCT/US96/12835 ✓ (22) International Filing Date: 31 July 1996 (31.07.96) ✓ (30) Priority Data: 08/511,561 4 August 1995 (04.08.95) ✓ US (71) Applicant: TRUETECH, INC. [US/US]; 680 Elton Avenue, Riverhead, NY 11901 (US)✓ (72) Inventor: LAMENDS DORF, Marc; 19 Casey Lane, Mount Sinai, NY 11766 (US). (74) Agent: GALGANO, Thomas, M.; Galgano & Burke, U.S. Federal Courthouse Building, Suite 135, 300 Rabro Drive, Hauppauge, NY 11788 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, 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: **FLAMELESS HEATER AND METHOD OF MAKING SAME**

(57) Abstract

A flameless heater (10) includes two non-woven polyester sheets (12, 14) which are thermally bonded along respective edges (16, 18, 20) and parallel weld lines (22, 24, 26) to form a number of pockets (28, 30, 32, 34). Each pocket is filled with a powder mixture of Mg-Fe alloy, NaCl, antifoaming agents, and an inert filler. The outer surfaces of the polyester sheets are preferably treated with a food grade surfactant. The polyester sheets are gas and water permeable over substantially their entire surfaces and the filled pockets define intervening channels (29, 31, 33, 29a, 31a, 33a) where the polyester sheets are bonded. Both the channels and the permeability of the sheets allow water to wet the powder rapidly and initiate the chemical reactions quickly. The byproducts of the chemical reactions exit the pockets through the permeable sheets and are directed away from the reaction via the channels.



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