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(21) International Application Number: PCT/US98/27526 (22) International Filing Date: 28 December 1998 (28.12.98) (30) Priority Data: 09/008,667 16 January 1998 (16.01.98) US (71) Applicant: FIKE CORPORATION [US/US], 704 South 10th Street, Blue Springs, MO 64013 (US) (72) Inventor: LEONARD, Brent, W., 3612 Charlotte, Kansas City, MO 64109 (US). (74) Agent: WILLIAMS, Warren, N.; Hovey, Williams, Timmons & Collins, Suite 400, 2405 Grand Boulevard, Kansas City, MO 64108 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: MULTIPLE DOME SINGLE-PANEL EXPLOSION VENT (57) Abstract An explosion vent (10) for covering an opening (12) in an enclosure (14) subject to the built-up of pressure is disclosed. The explosion vent includes a peripheral flange (16) configured for attachment to the enclosure around the opening, a pressure relief panel (18) positioned within and hingedly connected to the flange, and a plurality of connectors or rupture tab assemblies (19) connecting the unhinged portion of the pressure relief panel to the flange. The connectors break when the enclosure is subjected to pressure build-up for permitting the panel to shift outwardly from the enclosure for uncovering the opening in the enclosure. Rivets (72) are provided for attaching the rupture tab assemblies (19) to the pressure relief panel (18) which function to provide additional panel support and minimize localized bending of the rupture tabs (21) forming a part of assemblies (19) when the explosion vent is subjected to vacuum conditions, but do not interfere with rupture of the tabs and opening of the panel at a relatively low burst pressure. The pressure relief panel has a plurality of domed sections (46-52) presenting at least one valley defining bridge (54-58) therebetween. The domed sections and bridges cooperate to stiffen the panel so that it more uniformly distributes force on the connectors, causing all of the connectors to break at approximately the same time so that the panel more consistently opens at a selected burst pressure level. This Sheet Has Been Replaced 		