

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 September 2004 (16.09.2004)

PCT

(10) International Publication Number
WO 2004/079110 A3

(51) International Patent Classification⁷: E04H 14/00, 9/00

(21) International Application Number:

PCT/US2004/005276

(22) International Filing Date: 20 February 2004 (20.02.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/378,771 4 March 2003 (04.03.2003) US

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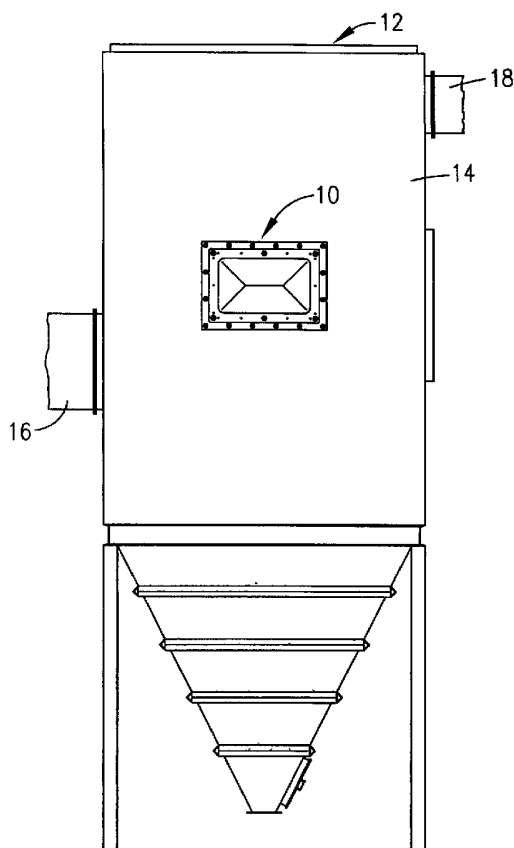
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: UNITARY OVERPRESSURE VENT PANEL STRUCTURE



(57) Abstract: Unitary one-piece frameless overpressure vent panel assembly (10) includes a rigid, generally planar primary support member having a central relief opening (26), a rigid, generally planar secondary support member (44) provided with a central relief aperture (46), and a frangible vent panel (30) between the support members in full closing relationship to the relief opening and the aperture. A sealant element (48) may be provided between the vent panel and at least one of the support members in circumscribing relationship to the relief opening or aperture. At least one line of weakness (34) may be provided in the vent panel. A flexible gasket (58) secured to the secondary support member assures a fluid tight seal between the vent panel assembly and the structure defining a protected zone. Alternatively, a knife blade or the like may be provided adjacent the vent panel to effect severing thereof under a predetermined overpressure in lieu of a line of weakness in the panel.



(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) **Date of publication of the international search report:**

25 November 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/05276

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : E04H 14/00, 9/00

US CL : 52/1, 2.11, 98.99, 217, 100; 220/207, 89.1, 89.2

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 52/1, 2.11, 98.99, 217, 100; 220/207, 89.1, 89.2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | US 6,070,365 A (LEONARD) 06 June 2000, see entire document. | 1-3,5,8,10,13-19 |
| --- | | |
| Y | | 4,7,6,9,11,12,20 |
| Y | US 6,367,203 B1 (GRAHAM ET AL) 09 April 2002, see entire document. | 4 |
| Y | US 5,558,114 A (STRELOW) 24 September 1996, see entire document. | 7 |
| Y | US 4,741,542 A (KIMERLY) 03 May 1988, see entire document. | 11 |
| Y | US 4,498,261 A (WILSON ET AL) 12 February 1985, see entire document. | 12 |
| Y | US 5,906,288 A (DWINELL) 25 May 1999, see entire document. | 20 |
| A | US 4,777,974 A (SWIFT ET AL) 18 October 1988 | |
| A | US 4,612,739 A (WILSON) 23 September 1986 | |

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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Date of the actual completion of the international search

09 August 2004 (09.08.2004)

Date of mailing of the international search report

05 OCT 2004

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INTERNATIONAL SEARCH REPORT

PCT/US04/05276

Continuation of B. FIELDS SEARCHED Item 3:

USPAT, USOCR

overpressure with vent with panel, tubular, gasket, weld and tubular, planar, rectangular with hollow with gasket, window, knife, blade