

(51) International Patent Classification:
A62C 37/14 (2006.01)(21) International Application Number:
PCT/US2012/039684(22) International Filing Date:
25 May 2012 (25.05.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

61/490,737	27 May 2011 (27.05.2011)	US
61/496,347	13 June 2011 (13.06.2011)	US
13/176,834	6 July 2011 (06.07.2011)	US

(72) Inventor; and

(71) Applicant : SHIPMAN, Buddy, Clayton [US/US]; 742
Ridge Hollow Drive, Heath, TX 75032 (US).(74) Agent: KUBASTA, Kelly, J.; Klemchuk Kubasta LLP,
8150 N. Central Expressway; Tenth Floor, Dallas, TX
75206 (US).

AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

(54) Title: X-BRACE AND FLEXIBLE CONNECTION FOR FIRE SPRINKLERS

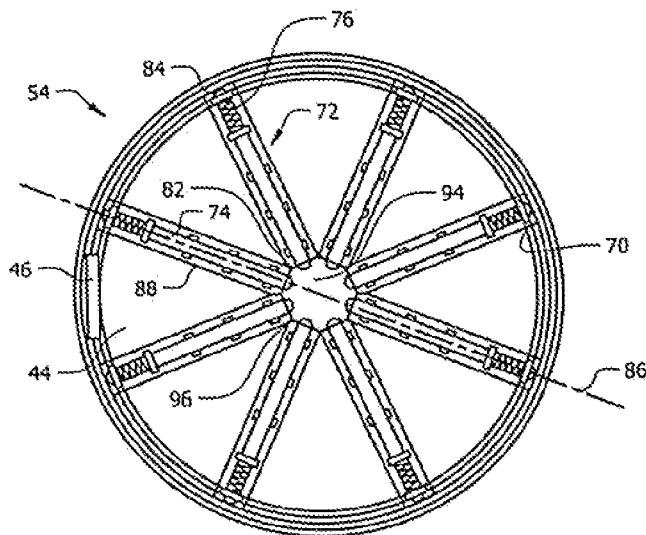


FIG. 2

(57) Abstract: A fire sprinkler head (12) has a valve (42) with an X-brace latch (54), and includes a flexible conduit (14). A sprinkler nozzle (16) is secured to a first end of the flexible conduit (14). The sprinkler nozzle (16) includes a first fitting (28), a sprinkler orifice (20) and fusible element (22). A second fitting (40) is secured to the second end of the flexible conduit (14) and includes the valve (42). The valve (42) has a valve element (44) which is moveable from a latched position to an unlatched position. A flexible link (56) extends from the sprinkler nozzle (16) to the X-brace valve latch (54). Breaking of the fusible element (22) releases the flexible link (56) to move from the latched position to the unlatched position, releasing the valve (42) for flow there-through.