



New connection on: : 11-05-2018 : 01:30:46 - Last disconnection on: : 10-05-2018 : 23:08:11

V 4.0.0.44358(LP,U,linux) (Rev:43856 2017-04-27 09:03:29 +0200#(D201802)) (RPM D201802)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 9] ..fi epodoc

 Database: EPODOC

[EPODOC: SS 9] A62B1/c/low

Results in EPODOC **8.282**

[SS 10] * and building+

Results in EPODOC **1.072**

[SS 11] * and harness+

Results in EPODOC **114**

[SS 12] * and PD<2017-03-10

* is exclusively used for *Mn, relative SS numbers or *XT. *ERROR(-101315)*

[SS 12] * and PD<2017-03-10

Results in EPODOC **112**

[SS 13] ..v

[EPODOC: SS 13] ..li 1-10



1/112 © EPODOC / EPO

PN - [US2016008638](#) A1 20160114

PR - US201414325759 20140708

AP - US201414325759 20140708

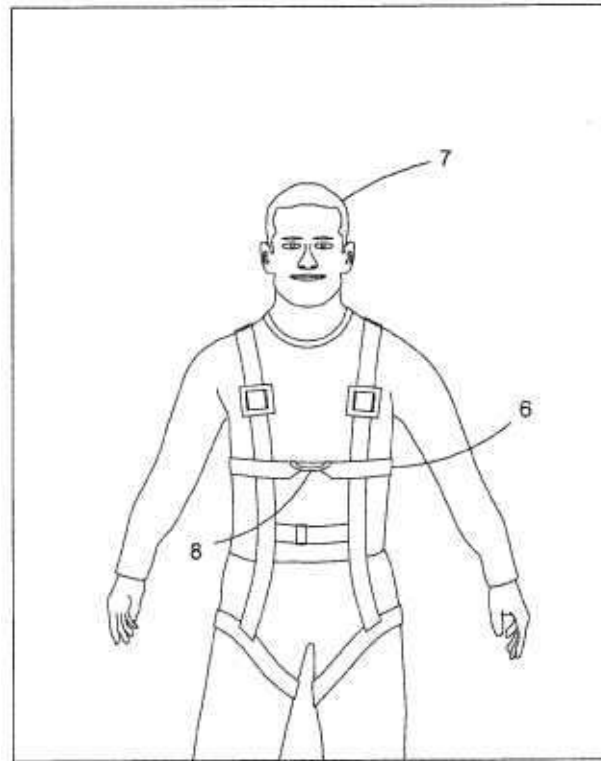
DT - *; Rep

CCI - [A62B1/14](#) ; [A62B35/0068](#)

PA - HAFNER WILLIAM [US]

TI - FIRE ESCAPE SYSTEM

AB - A fire escape system wherein anchors for rappelling are strategically placed on the different faces of a multi-story **building**. This system employs rappelling ropes and **harnesses** to be used by **building** occupants in the event of a fire emergency to allow efficient and safe evacuation of all occupants.



2/112 © EPODOC / EPO

PN - [US2015314142](#) A1 20151105

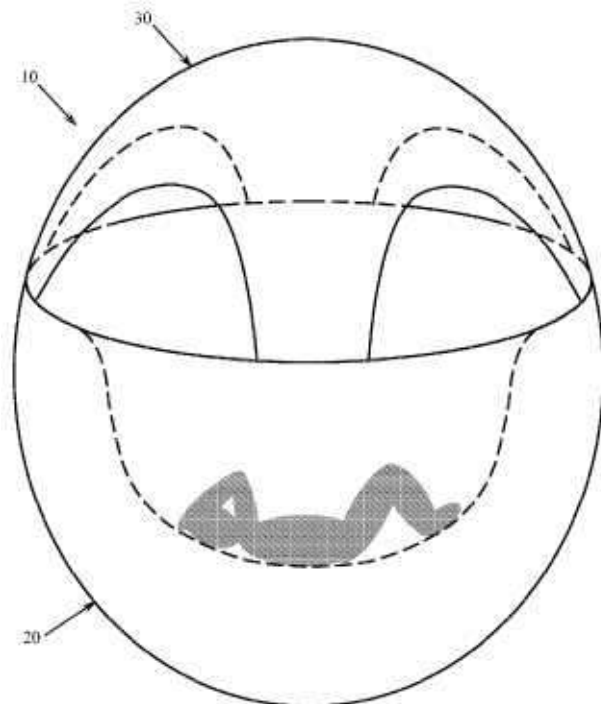
PNFP - US9364692 B2 20160614

PR - US201414269094 20140503

AP - US201414269094 20140503

DT - *; Rep

CT - || STSE (B2)
[US1042327](#) A 19121022 [] (COSTANZO JOSEPH J [US])
[US3520503](#) A 19700714 [] (MCGEHEE JOHN R)
[US3921944](#) A 19751125 [] (MORRISON BARCLAY)
[US4089065](#) A 19780516 [] (MCGEE MICHAEL HENRY)
[US4508294](#) A 19850402 [] (LORCH DANIEL L [US])
[US4637074](#) A 19870120 [] (TAHERI SYDE A [US])
[US4825469](#) A 19890502 [] (KINCHELOE DAN [US])
[US4977623](#) A 19901218 [] (DEMARCO VINCENT J [US])
[US5500952](#) A 19960326 []



] (KEYES MARSHALL J [US])
[US5568902](#) A 19961029 [
] (HURLEY JR RUPERT B [US])
[US5781936](#) A 19980721 [
] (ALALOOF JACOB [IL])
[US6213429](#) B1 20010410 [
] (CHU HSIN-CHUAN [TW])
[US6607166](#) B1 20030819 [
] (PICHKHADZE KONSTANTIN
 [RU], et al)
[US6705572](#) B1 20040316 [
] (CHRISTOPHER KARIM S [US])
[US6708927](#) B2 20040323 [
] (CHEN JACK [TW])
[US7343632](#) B2 20080318 [
] (NERON REJEAN [CA])
[US8833517](#) B2 20140916 [
] (FILATOV ANDREI VASILEVICH
 [RU], et al)
[US9027886](#) B1 20150512 [
] (MECHELS ROGER J [US])

- || R141 (A1)

[US1042327](#) A [];
[US3520503](#) A [];
[US3921944](#) A [];
[US4089065](#) A [];
[US4508294](#) A [];
[US4637074](#) A [];
[US4825469](#) A [];
[US4977623](#) A [];
[US5500952](#) A [];
[US5568902](#) A [];
[US5781936](#) A [];
[US6213429](#) B1 [];
[US6607166](#) B1 [];
[US6705572](#) B1 [];
[US6708927](#) B2 [];
[US7343632](#) B2 [];
[US8833517](#) B2 [];
[US9027886](#) B1 []

CCI	- A62B1/02 ; A62B1/22
CUI	- B64D1/14 ; B64D17/00 ; B64D25/00
PA	- (A1 B2) WANG FENG [US]; LI WAYNE [US]; HU YUNHUA [US]
TI	- (A1 B2) INFLATABLE LIFESAVING DEVICE

AB

- (A1 B2)

An inflatable lifesaving device is designed to provide a user with an apparatus to escape a high rise **building** in emergency situations in a sufficiently rapid manner. It is simply composed of a hemisphere including a plurality of independent cell airbags, internal hoses, and check valves, a parachute integrated with the hemisphere, an air supply system, an external hose, a quick release hose coupler, a **harness** mounted on the body of the user, a connection rope that connects the **harness** to the inside of the **building**, a rope quick release to separate the connection rope, a descent rope, a backpack. To operate the inflatable lifesaving device, the user wearing the **harness** with the backpack exits a window or a balcony with the **harness** connected to the inside of the **building** through the connection rope with the release device. The air supply system is then turned on and high pressure air inflates and opens up the hemisphere and the parachute so that they are gradually formed from the back of the user to the front, and eventually the user is surrounded by them. after that, the external hose and the connection rope are released. As a result, the user will move down with the hemisphere and the parachute.

3/112 © EPODOC / EPO

PN - [CN104395046](#) A 20150304

PR - WO2013ES00064 20130228; ES20120000265 20120305

AP - CN2013819703 20130228

DT - I

CCI - [A62B1/10](#)

CUI - [A62B1/08](#)
CNOI - [B28B1/08](#)
PA - TAMAYO INSUA JOAQUIN
TI - Electromechanical apparatus for evacuating **buildings** in the event of fire
AB - An electromechanical apparatus for evacuating **buildings** in the event of a fire is disclosed in an embodiment. The apparatus comprises a reel (9) that has, rolled up on it, a mooring cable (36) that longitudinally passes through the inside of a rigid tube (1), ending in an evacuation **harness**, where an individual will be secured. The weight of the individual makes it possible to rock the tube (1) and a lever (14) that has a braking disc (4) and which acts on a brake disc (5) that allows, by means of a mechanical transmission system, the braking and/or retention of the reel (9) and consequently the descent of the individual. There is a radio-control unit (74) and a standalone electric and electronic safety system (74, 75, 76 and 77) that is activated when the speed of descent of the individual is too great. The apparatus allows evacuation and can be reused, once used. The apparatus carries away, brakes, retains and evacuates the individual making use of the electromechanical apparatus.

4/112 © EPODOC / EPO

PN - [US2015028275](#) A1 20150129
PNFP - US9381384 B2 20160705
PR - ES20120000265 20120305; WO2013ES00064 20130228
AP - US201314382651 20130228
DT - **
CT - || STSE (B2)
[US4503933](#) A 19850312 [] (O'NEIL MICHAEL J [US])
[US4703832](#) A 19871103 [] (FONTENOT OZEMAN J [US])
[US5067593](#) A 19911126 [] (TANAKA MASAKATSU [JP], et al)
[US2006054420](#) A1 20060316 [] (GORDON TAL [IL], et al)
[US2009014242](#) A1 20090115 [] (TANG HAISHAN [CN])
[US2010273597](#) A1 20101028 [] (WILSON JR DAVID [US])
[US2013299281](#) A1 20131114 [] (LAEHTENMAEKI JUSSI [FI], et al)
[GB295976](#) A 19280816 []
- || R141 (A1)
[US2006054420](#) A1 [];
[US2013299281](#) A1 [];
[US5067593](#) A [];
[US2009014242](#) A1 [];
[US4503933](#) A [];
[US4703832](#) A [];
[US2010273597](#) A1 [];
[GB295976](#) A []
CCI - [A62B1/10](#)
CUI - [A62B1/08](#)
PA - (A1 B2)
TAMAYO INSUA JOAQUÍN [ES]

TI - (A1 B2)
ELECTROMECHANICAL APPARATUS FOR EVACUATING **BUILDINGS** IN THE EVENT OF A FIRE

AB - (A1 B2)
An electromechanical apparatus for evacuating **buildings** in the event of a fire includes a reel that has, rolled up on it, a mooring cable that longitudinally passes through the inside of a rigid tube, ending in an evacuation **harness**, where an individual will be secured. The weight of the individual makes it possible to rock the tube and a lever that has a braking disc and which acts on a brake disc that allows, by means of a mechanical transmission system, the braking and/or retention of the reel and consequently the descent of the individual. There is a radio-control unit and a standalone electric and electronic safety system that is activated when the speed of descent of the individual is too great. The apparatus allows evacuation and can be reused, once used. The apparatus carries away, brakes, retains and evacuates the individual making use of the electromechanical apparatus.

5/112 © EPODOC / EPO

PN - [CA2866677](#) A1 20130912

PR - ES20120000265 20120305; WO2013ES00064 20130228

AP - CA20132866677 20130228

DT - I

CCI - [A62B1/10](#)

CUI - [A62B1/08](#)

PA - TAMAYO INSUA JOAQUIN [ES]

TI - ELECTROMECHANICAL APPARATUS FOR EVACUATING **BUILDINGS** IN THE EVENT OF A FIRE

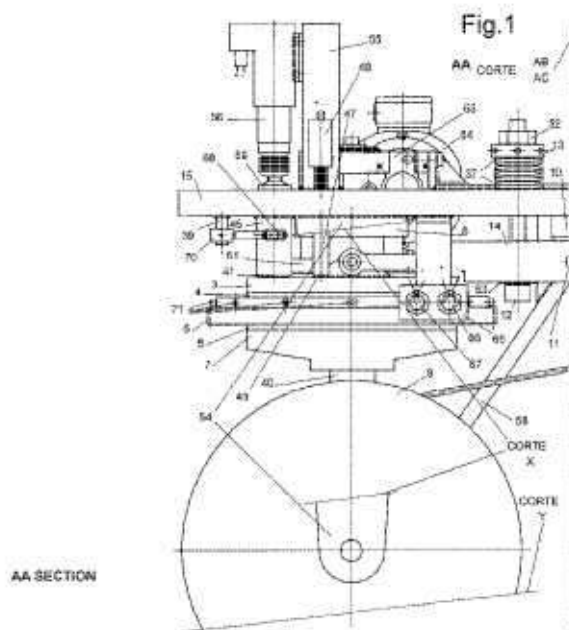
AB - Electromechanical apparatus for evacuating **buildings** in the event of a fire. The apparatus comprises a reel (9) that has, rolled up on it, a mooring cable (36) that longitudinally passes through the inside of a rigid tube (1), ending in an evacuation **harness**, where an individual will be secured. The weight of the individual makes it possible to rock said tube (1) and a lever (14) that has a braking disc (4) and which acts on a brake disc (5) that allows, by means of a mechanical transmission system, the braking and/or retention of the reel (9) and consequently the descent of the individual. There is a radio-control unit (74) and a standalone electric and electronic safety system (74, 75, 76 and 77) that is activated when the speed of descent of the individual is too great. The apparatus allows evacuation and can be reused, once used. The apparatus carries away, brakes, retains and evacuates the individual making use of the electromechanical apparatus.

6/112 © EPODOC / EPO

PN - [WO2013132119](#) A1 20130912
 PR - ES20120000265 20120305
 AP - WO2013ES00064 20130228
 DT - **
 CT - |ES| ISR (A1)
 [ES2249132](#) A1 20060316
 [Y] (TAMAYO INSUA JOAQUIN [ES]);
 [US4703831](#) A 19871103
 [Y] (FORREST WILLIAM E [US], et al);
 [CN101095970](#) A 20080102
 [Y] (JIAZHENG WU [CN]);
 [WO8203015](#) A1 19820916
 [A] (KIBBIE WILLIAM EDWARD);
 [US4440261](#) A 19840403
 [A] (CLARK MARK J [US]);
 [CA2409261](#) A1 20030423
 [A] (MALDEN MILLS IND INC [US]);
 [JP2008188195](#) A 20080821
 [A] (SHIRAKAWA MASAOKI)

 CCI - [A62B1/10](#)
 CUI - [A62B1/08](#)
 PA - TAMAYO INSUA JOAQUIN [ES]
 TI - ELECTROMECHANICAL APPARATUS
 FOR EVACUATING **BUILDINGS** IN
 THE EVENT OF A FIRE

 AB - Electromechanical apparatus for
 evacuating **buildings** in the event
 of a fire. The apparatus
 comprises a reel (9) that has,
 rolled up on it, a mooring cable
 (36) that longitudinally passes
 through the inside of a rigid tube
 (1), ending in an
 evacuation **harness**, where an
 individual will be secured. The
 weight of the individual makes it
 possible to rock said tube (1)
 and a lever (14) that has a
 braking disc (4) and which acts
 on a brake disc (5) that allows,
 by means of a mechanical
 transmission system, the braking
 and/or retention of the reel (9)
 and consequently the descent of
 the individual. There is a radio-



control unit (74) and a standalone electric and electronic safety system (74, 75, 76 and 77) that is activated when the speed of descent of the individual is too great. The apparatus allows evacuation and can be reused, once used. The apparatus carries away, brakes, retains and evacuates the individual making use of the electromechanical apparatus.

7/112 © EPODOC / EPO

PN - [US8522918](#) B1 20130903

PR - US201313762287 20130207

AP - US201313762287 20130207

DT - *

CT - [US190829](#) A []; [US2317346](#) A [];
[US2574178](#) A []; [US2613953](#) A [];
[US2960180](#) A []; [US3006431](#) A [];
[US3415340](#) A []; [US3717219](#) A [];
[US3869021](#) A []; [US4056166](#) A [];
[US4448281](#) A []; [US4560029](#) A [];
[US4694934](#) A []; [US4768619](#) A [];
[US5657543](#) A []; [US5913383](#) A [];
[US5971668](#) A []; [US6095502](#) A [];
[US6308355](#) B1 []; [US6405440](#) B1 [];
[US6481528](#) B2 []; [US6817443](#) B1 [];
[US6820721](#) B1 []; [US7055653](#) B2 [];
[US2001047904](#) A1 []; [US2002112916](#) A1 [];
[US2006070809](#) A1 []; [US2008087498](#) A1 [];
[US2009236177](#) A1 []; [US2010065373](#) A1 [];
[US2010282541](#) A1 []; [US2013075195](#) A1 []

CCI - [A62B1/14](#) ; [A62B35/0006](#)

PA - AL-WASIS ADEL ABDULMUHSEN [KW]

TI - Rescue **harness**

AB - The rescue **harness** is a personal use device for donning by an individual requiring escape from an elevated location in a **building** structure or the like. The **harness** includes a front latch and bracket having a removable combination glass cutter and hammer, and a removable explosive charge. A rope brake is also secured to the bracket, and a rope passes through the brake. The user of the **harness** removes the glass cutter and hammer combination, and scribes an opening on a glass window panel. The explosive charge is placed on the glass in the scribed area. A timer permits the user to momentarily leave the immediate vicinity. The hammer is used to break out any remaining glass shards after the explosion blows out the scribed area of glass. The user exits the structure through the hole in the panel, using the rope brake to control his or

her descent.

8/112 © EPODOC / EPO

- PN - [WO2012148306](#) A1 20121101
- PR - RU20110116649 20110427
- AP - WO2011RU00955 20111202
- DT - *; Rep
- CT - |RU| ISR (A1)
[RU2059531](#) C1 19960510
[Y] (KARASYUK OLEG N [RU]);
[US2005288114](#) A1 20051229
[Y] (MEADOWS JOSEPH S [US]);
[RU2205048](#) C1 20030527
[A] (VORONJUK ANATOLIJ
ALEKSANDROVI);
[SU1250314](#) A1 19860815 [A] (UK
DRUZHBY NARODOV I INZH VODN
[SU])
- CCI - [A62B1/00](#) ; [B64B1/40](#) ;
[B64B1/62](#)
- PA - LUKYANOV SERGEJ ANATOLEVICH
[RU]
- TI - HEIGHT-GATHERING SURVIVAL
MEANS (VARIANT EMBODIMENTS)
- AB - The present invention relates to
survival means which are usable
in regions prone to tsunamis or
mudslides, and also in the event
of shipwrecks at sea, or in
situations involving self-rescue
from skyscrapers or
tall **buildings** where it is possible
to exit onto the roof. The height-
gathering survival means
comprises an envelope, cords, a
user **harness**, a flexible tube, a
height-lowering means, and a
filling means with a feed valve.
The envelope is connected to the
user **harness** by the cords and
has a cavity with an opening
which is connected to the filling
means by means of the flexible
tube. The feed valve is mounted
at the outlet from the filling
means. According to a first
embodiment, the height-lowering

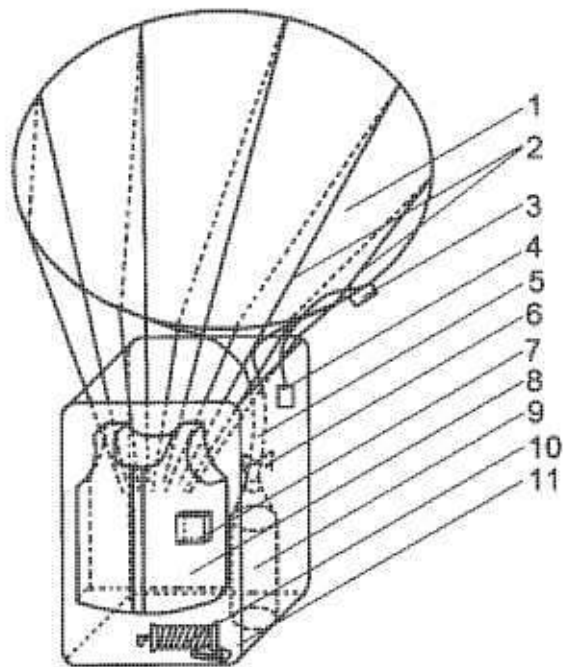
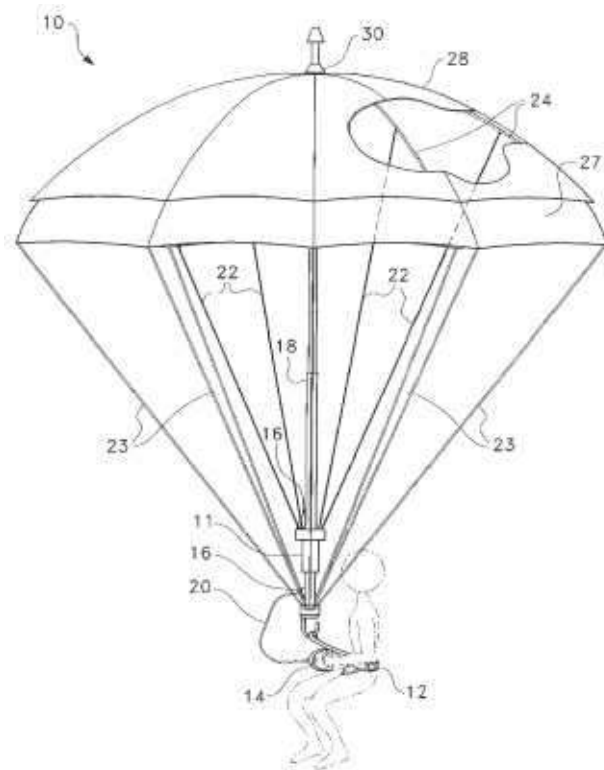


Fig. 1

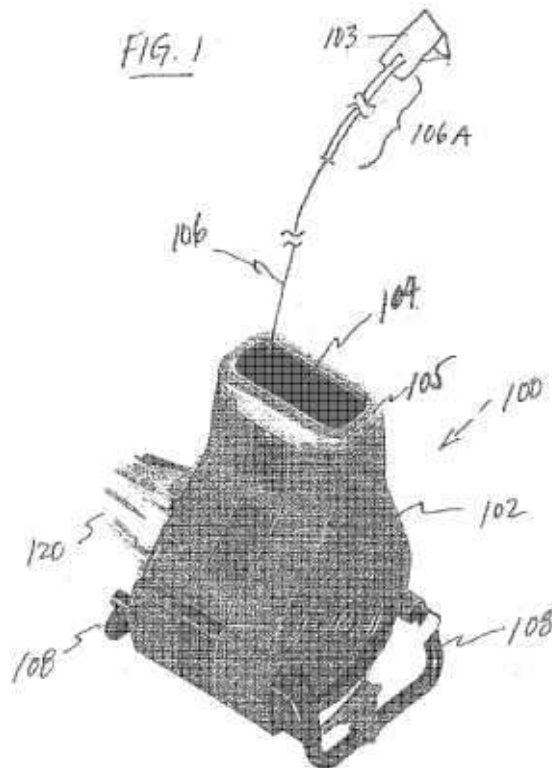
means is in the form of a discharge valve which is mounted in the envelope so as to be able to release the contents of the casing to the outside. According to a second embodiment, the height-lowering means is in the form of a cable, one end of which is provided with an anchoring means, while the other end is connected to the user **harness**. The technical result of the claimed invention consists in increasing the reliability with which the user is returned to earth.

- 9/112** © EPODOC / EPO
- PN - [US2012049005](#) A1 20120301
- PR - US201113288652
20111103; WO2009US05485
20091006; US201113035593
20110225; US20100282640P
20100310
- AP - US201113288652 20111103
- DT - *; Rep
- CT - || R141 (A1)
[US996058](#) A [];
[US1025386](#) A [];
[US1339828](#) A [];
[US1444017](#) A [];
[US2929588](#) A [];
[US4105173](#) A [];
[US5816276](#) A [];
[US2004135033](#) A1 [];
[US2008173764](#) A1 [];
[US2008163907](#) A1 [];
[GB2220626](#) A []
- CCI - [A62B1/02](#) ; [B64D17/70](#)
- PA - SUH BONG H [US]
- TI - MECHANICALLY OPENING
PARACHUTE
- AB - The mechanically opening
parachute is a parachute that
may be opened quickly at low
altitudes, such as during an
emergency exit from an



office **building**, for example. The mechanically opening parachute includes a telescopic tube having opposed upper and lower ends. A **harness** adapted for releasably holding the user is secured to the lower end of the telescopic tube. The mechanically opening parachute operates similarly to a conventional umbrella, with the telescopic tube automatically opening upon actuation by the user, and with a conventional umbrella stretcher opening a plurality of ribs secured to a parachute canopy. Preferably, an annular skirt is fixed about the perimeter of the canopy. Suspension cords extend from the annular skirt to the lower end of the telescopic tube.

- 10/112** © EPODOC / EPO
- PN - [TW200920438](#) A 20090516
- PR - US20070950451P 20070718
- AP - TW20080127541 20080718
- DT - I
- CCI - [A62B1/10](#)
- PA - STONE S THROW LLC [US]
- TI - Personal escape device and methods for using same
- AB - The invention presents devices for controlled descent from **buildings**. Such a device includes a housing having a primary spool about which a cord is wound, a payload coupler for attaching a **harness** assembly to the housing, and an unwind control assembly for controlling the rate of exit of the cord from the housing. An inventive device kit may include a convertible storage unit used to protectively store a device and which, upon deployment, may be



used as a protective helmet. In using an inventive device, a user attaches the device to a fixture in a **building**, dons a **harness** and the converted helmet, attaches the device to the **harness**, and exits the **building** from a window or roof.

[SS 13]