NON-DISCLOSURE AGREEMENT

DATE:

This agreement is made by and between John Middendorf ("Inventor"), and

)("Recipient")

This Agreement shall govern the conditions of disclosure by INVENTOR to RECIPIENT of certain "Confidential Information" including but not limited to prototypes, drawings, data, trade secrets and intellectual property relating to the invention by INVENTOR as:

D4 8-piece Bullet Frame, as described in attached provisional patent description.

With regard to the Confidential Information, RECIPIENT hereby agrees:

1. Not to use the information therein except for evaluating its interest in entering a business relationship with INVENTOR, based on the invention.

2. To safeguard the information against disclosure to others with the same degree of care as exercised with its own information of a similar nature.

3. Not to disclose the information to others, without the express written permission of INVENTOR, except that:

a. which RECIPIENT can demonstrate by written records was previously known;

b. which are now, or become in the future, public knowledge other than through acts or omissions of RECIPIENT;

c. which are lawfully obtained by RECIPIENT from sources independent of INVENTOR;

4. That RECIPIENT shall not directly or indirectly acquire any interest in, or design, create, manufacture, sell or otherwise deal with any item or product, containing, based upon or derived from the information, except as may be expressly agreed to in writing by INVENTOR.

5. That the secrecy obligations of RECIPIENT with respect to the information shall continue for a period ending 3 years from the date signed hereof.

RECIPIENT also agrees to provide written feedback and user visuals (photos, videos, etc.) in exchange for current and future prototypes for testing purposes.

IN WITNESS WHEREOF the Parties have hereunto executed this Agreement as of the day and year first above written.

INVENTOR: John Middendorf March 1, 2018

RECIPIENT SIGNATURE: _____

Date:

Recipient Name, Address, Phone, and Email:

Patent Pending Ball End Joiner with 8-Piece Collapsible Frame. "D4 Eight-Piece Bullet Frame" John Middendorf March 1, 2018

This invention consists of a collapsible frame design with a novel and useful joiner system connecting tubes in a highly structural way while assisting ease of assembly. Portaledges are the deploying hanging platforms which climbers use for multi-day climbs, but this frame design may have other applications in other fields where a collapsible frame is employed. The new D4 8-piece portaledge design consists of curved tubular corners, hybrid-diameter frame design, and is comprised of eight approximately equal length sections continuously connected with shock cord to create a geometric shape.

Background: Prior portaledge designs have used either 6-piece frames, or 10-piece frames. 6piece frames are notably bulky and long, whereas 10-piece frames are heavier due to the additional joints. The D4 design uses 8 approximately equal-length sections, four curved and four straight, to create the optimal combination of packed size and maximum deployed area. The D4 frame also utilises curved corner sections, the first commercial portaledge to do so; existing portaledges designs utilise small "block" corners, which invoke higher stresses than the curved corner design.



The advantage of the 8-piece frame with approximately equal length sections is the packed size relative to the deployed area. The D4 full size portaledge deploys to 82" x 47", and packs to 29.5" x 10.375" (x 5"), making it the most compact portaledge ever designed relative to deployed size. This concept can also be employed with other rectangular sizes, notably the well-established A5 Alpine Double size (75" x 42.25"), with a similarly significantly smaller packed size compared to the standard 6-piece frame.

The D4 8-piece "hybrid-diameter" tubing frame system is novel in portaledge design, using larger diameter tubing in sections with greater stress. The hybrid-diameter frame design allows for the novel overlapping, ball-end joint system, the focus of this IP disclosure, to be employed.

The 8-piece frame concept can be extended to other shapes, notably the novel 8-piece folding Trapezium frame first disclosed by John Middendorf, inventor, on March 1, 2018. The Trapezoid 1.5 frame utilises 8 equal length sections, four curved and four straight to create optimal space for two people sitting up. The trapezoid shape with curved tubular corners is novel in portaledge and other deployable hanging platforms, and the trapezium frame can be sized for different purposes. The same concept can be extended to other shapes (i.e 6 or 8 sided shapes) with various bend angles, and the method of compact folding with a twist also applies to the 4-piece D4 MiniMe frame, as well as other multiples of 4 sections (i.e. 12 or 16 sections).



New Self Assembling Ball Joint for overlapping tubular joining ("D4 Bullet Joint"). The structural joint consists of:

- 1. a ridge which acts as a stop
- 2. a curved ball head which allows tubes to self-assemble.
- 3. a slot for the tensioning shock cord to pass through.

The joiner is hollow and lightweight, and is constructed of compressive resistant material, which could be metal, plastic, or composite. The joiner is joined onto a smaller diameter tube, and allows a second larger diameter tube to slip fit over the main section of the joiner, creating an overlapping joint, rather than a traditional system of using a separate structural joiner. This thin hollow ball head joint system with a slot for shock cord to pass through is novel and useful, and no findings were discovered of any similar self-assembling tubing joint during extensive existing patent searches in the USPTO database. In the case of the hybrid-diameter design, the joint's structural strength comes from the two tubes joined; however the shock corded ball joint system described here could also be extended a fully structural joint to join tubes of the same diameter.

