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Spare set of Claims

CLAIMS – break down

- 1.1 A rope-descending device for slowing the speed of descent of a load on a rope, comprising:
- 1.2 a ring defining an inner aperture,
- 5 1.3 said aperture sized to accommodate the rope;
- 1.4 a rail extending across the width of the aperture,
- 1.5 said rail adapted to provide a force on the rope; and
- 1.6 means for connecting the ring to the user of the rope-descending device,
- 1.7 wherein the rail and the aperture are configured such that the path of the rope through
- 10 the rope-descending device is linear.
- 2.1 A rope-descending device according to claim 1,
- 2.2 wherein the rail is integrally formed with the ring.
- 3.1 A rope-descending device according to claim 1 or claim 2,
- 3.2 wherein the device comprises 2 to 4 rails.
- 15 4.1 A rope-descending device according to claim 3,
- 4.4 wherein the width of the rails occupies substantially all of the aperture.
- 5.1 A method of braking a load on a rope using the device of claims 1–4, said method comprising:
- 5.2 securing the rope-descending device to a user;
- 20 5.3 securing one end of the rope to a load;
- 5.4 adding one or more rails extending across the width of the aperture of the rope-descending device,
- 5.5 said rails adapted to provide a force on the rope;

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5.6 passing the support rope through the device in a linear manner;

5.7 and lowering the load, whereby the user controls the rate of descent of the load by varying the level of friction provided by the device.

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The following abbreviations will be used throughout the exam:

PSA: person skilled in the art

CGK: common general knowledge

IC: inventive step

BVOD: by virtue of dependency

in novelty and infringement: Y means feature present, N means feature not present

Construction

Claim 1

1.1

“A rope-descending device”

- rope descending device – is suitable for use with a rope to lower something (i.e load or person)
- a device which controls the rate of descent of a load that is supported by a rope – page 3, line 5-6 ✓1
- this includes a person such as a mountain climber abseiling or rappelling – as shown in figure 1, see page 3, line 8 1
- or similar that can be used in construction industry and emergency services in rescue operations – see page 3, line 18-19 ✓1
- this also includes a device which is used to break a load on a rope – se page 5, line 30. for example, a device which provides a breaking force such as a belay device – page 5, line 35-36 1

“for slowing the speed of descent of a load on a rope”

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- for = suitable for
- slowing = means control the rate of descent – see page 3, line 5 and page 5, line 4 (i.e. primarily to reduce speed but can also mean increase where necessary because control implies it can be used to either increase or decrease speed).
breaking is included – see page 5, line 30
 - slowing is a relative term hence why “control” will be used for construction purposes ✓↑
- descent/ descending= means as the load is lowered from a height above ground level towards ground level (i.e. as a person abseils or as a load is lowered). See figure 1
- speed of descent = rate of descent – see page 3 line 21 —
- load
 - a load is something to be moved.
 - can be a person who is connected to a rope – i.e. mountain climber – see page 3, line 6-7
 - could also be any other load such as heavy goods to be lowered down because claim 1 does not specify a person. “user” is any person using the device not just the load being lowered (see later in claim 1)
 - does not include an outcrop (see figure 1) because it is not something to be moved. ✓↑
- rope – takes usual meaning of a long piece of material which is sufficiently strong to hold the weight of a load (for example, the weight of a full adult male) – see page 3, lines 8-19 and page 5, lines 30-36). rope can have various factors such as material, diameter and material – see page 3, line 23.

↳ part of device?

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- rope has two ends – 26 and 28 – see page 4, line 35-36 —
- can be a support rope – see claim 5 —

slowing the speed of descent of a load on a rope is done when the device is in use.

“comprising” – means including the following features but not limited to and can include other features —

1.2

“ring”

- a ring takes its usual meaning of a continuous loop – see fig 4
- an example ring is marked by item 10 in the figures 4-5
- has two ends and two sides – see page 4, line 32-33
- the ring can have rounded end (19',19'') and straight sides (16,17) as shown in fig 4. see page 4, lines 32-33, although it is not limited to this shape (a ring could be a circle)

✓1

1

“defining” – the ring forms the edge of the aperture such that the aperture is formed by the internal area of the ring – see figure 3 and page 4, line 32-33

“inner aperture” –

- inner means that the aperture is internal to the ring and takes up the whole space inside the ring (see figure 4). —
- aperture means a unobstructed space or hole (see page 5, line 14) - item 12 in figure 4 (see page 4, line 32). —
- aperture has a width from side-to-side– see page 5, line 6.
- aperture space can be taken up by the rails - see page 5, line 14-15 —

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1.3

“said aperture” – the inner aperture of 1.2

“sized to accommodate the rope” means sufficiently large to allow a rope to be inserted through the aperture such that it can pass through the ring. has the function of allowing the rope to pass through it. figure 4

rope part of
device?

1.4

“a rail”

- A rail can be defined by a loop structure – page 4, line 33
 - a loop can provide a rail – “The number of loops can be altered to provide one or more rails across the aperture (12)” – see page 5, lines 12-13 ✓1
- However, a rail is not limited to a loop structure because other structures can be envisaged. For example, optionally, the rail is integrally formed with the ring – see page 5, line 27. Integral is not a requirement because this is a further limitation in claim 2 (repercussive effect). ✓
- The rail has the function of providing friction to the rope by providing a contact area– see page 5, line 4-9 (i.e. more friction with more rails that occupy a wider space) and page 5, lines 13-22.
- the rail can slide in an end-to-end direction relative to ring (not a requirement as it could be integrally fixed)– see page 5, line 12
- the rail has a width (i.e rail width) – see claim 4 (repressive effect). the width is taken as the measurement of the rail from end to end of the ring when the rail is positioned on the ring – see figure 4
- optionally can have more than one rail – see figures 5a- 5b and page 5, line 6 ✓1

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“extending across width of aperture”

- extending across means located such that the rail wholly crosses from one side of the ring to the other side – see figure 4
- width of aperture = internal distance from side to side of the ring (see sides 17 and 16 in figure 4) ✓
- the rail only has to cross the ring on one face (i.e. it is not required to have the loop on both sides because it could be integrally formed instead – see page 5, line 27).

1.5

“said rail adapted to provide force on the rope”

the rail of 1.4

adapted – means configured to (in use)

provide – apply a force to the rope

force – the force must be a frictional force – see page 5, line 19 and page 5, line 3-9.

includes a breaking force (see page 5, line 35). friction is provided by the contact between rail and rope. ✓1

1

therefore, the function of the rail must include being able to provide a frictional force by providing a contact area– see page 5, line 4-9 (i.e. more friction with more rails that occupy a wider space) and page 5, lines 13-22.

1.6

- means for – means suitable for i.e. any component with the following functionality —

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“means for connecting the ring to the user of the rope-descending device” –

- the means must include the functionality of securing the ring to a person (i.e user)
- can include a plate (item 30 in figures) and carabiner/rope however could also be other features that provide above functionality because “means” is broader than just a plate or carabiner.
- The plate (30) has two openings to accommodate a means to attach the device (1) to the user. In one embodiment, the attaching means is a carabiner. In another embodiment, the attaching means may be a rope or other suitable means to connect the device to a user via the user's harness. – see page 5, lines 23-25
- the user can be a person abseiling or a person on the ground lowering another person or other load ✓1

1

1.7

“wherein the rail and the aperture are configured such that” – the rail of 1.4 and inner aperture of 1.2 are configured in use so that they can achieve following effect

“the path of the rope” – the path of the rope is the direction that the rope travels in from end to end (see figure 4 and page 4, line 25-26). When viewed from in the plan view of figure 4 – see page 4, line 39

“through the rope-descending device” – therefore only need to consider the path of the rope as it traverses (see page 5, line 33) the rope-descending device itself (see figure 4 and page 4, line 39)– i.e. not the path of the rope compared to any surrounding as in figure 1. —

“is linear” –

- essentially linear – see page 4, line 29 —

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- “in use, the support rope traverses the rope-descending device of the invention in a linear fashion such that, *even though the support rope bends to pass over the rails(s), the line of action of the rope does not deviate to any notable degree from a linear path as it passes through the device from end-to-end, at least in a side-to-side direction*” – see page 5, line 37-40
- the linear path is the path from the first end (i.e. end 19”) to the second end (i.e. end 19”). this is a straight line path. ✓1

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Claim 2

Cl. 1 8

2.1

“A rope-descending device according to claim 1,”

- dependent on claim 1, including all the features of claim 1

2.2.

“wherein the rail is integrally formed with the ring”

- the rail is integrally formed with the ring. In this embodiment, the entire rope-descending device may be manufactured as one unit. – see page 5, lines 27-26
- Additional loops can be used with the integrally formed rail to alter the level of friction provided by the device. page 5, lines 26-27 ✓1
- cannot slide when integral because it is manufactured as one unit so the ring and rail cannot move relative to each other

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Claim 3

3.1

“A rope-descending device according to claim 1 or claim 2,”

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- dependent on claims 1 or 2, therefore can include
- all the features of claim 1 *or*
- all the features of claim 1 and 2 ✓

3.2

“wherein the device comprises 2 to 4 rails”

- the device is the rope descending device
- includes at least two rails and a maximum of four rails (i.e. inclusive)
 - therefore, includes the possibility of 2 rails (e.g. fig 5b), 3 rails (e.g. fig 5c) or 4 rails (not shown) ✓1

1

Claim 4

4.1

“A rope-descending device according to claim 3,”

- dependent on claim 3, therefore can include
- all the features of claims 1 and 3 *or*
- all the features of claim 1, 2 and 3 ✓

4.2

“wherein the width of the rails occupies substantially all of the aperture”.

- width = rail width as defined in 1.4 (i.e. the measurement of the rail from end to end of the ring when the rail is positioned on the ring) – see figure 4
- “width of the rails” - combined width of the rails (i.e if two rails then the combined width of both rails) ✓1
- “occupies” - unobstructed space in the aperture (12) decreases because it is taken up by the rails potential

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- “substantially all of the aperture” – this means enough of the aperture is occupied such as that maximal level of friction is achieved however there is still space for the rope (i.e. only carabiner and rope and no other space). – see page 5, lines 20-22 and figure 5c. ✓1

1

Claim 5

5.1

“A method of braking a load on a rope using the device of claims 1–4, said method comprising:”

- an independent method claim
- must include the device of any of claims 1-4
- therefore can include following combinations
 - features of claim 1
 - features of claim 1 and 2
 - features of claims 1, 2 and 3
 - features of claims 1 and 3
 - features of claims 1, 2, 3 and 4
 - features of claim 1, 3, and 4 ✓
- method of break a load on a rope
 - break – meaning slow down the descent of a load on a rope. similar to the function of a carabiner brake which slows down loads as they descend from a relative higher position – see discussion in patent on page 3, lines 25-39.
 - includes providing a breaking force like a belay device for lowering a load whilst the user remains stationary (page 5, line 34-36)
 - does not include the function of an abseiling person breaking themselves as they descend (See page 3, line 6-7) because one end of the rope would not be secured to a load in this configuration because an outcrop is not a load
 - load and rope take same meaning as claim 1 ✓1

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5.2

“securing the rope-descending device to a user”

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- using the means for connecting the ring to the user – see 1.7
- securing means connecting – see claim 1
- user can be person on ground or someone abseiling – see 5.1

5.3

—

“securing one end of the rope to a load”

- securing again means connecting – see 5.1
- one end of the rope (i.e. the non-trailing end) – see item 26 in fig 4
- can be via an intermediate feature such as an outcrop
- should be “the load” (amend)

—

5.4 “adding one or more rails extending across the width of the aperture of the rope-descending device,”

- adding = inserting the rail to extend across the width of the aperture (as item 1.4)
- one or more = one is enough to meet construction requirement but can also include more than one
- rails,width and aperture = as claim 1

✓1

1

5.5 “said rails adapted to provide a force on the rope”

- as for 1.5

—

5.6 “passing the support rope through the device in a linear manner”

- “support rope” = rope
- “passing” – i.e. threading the rope through the aperture that is sized to accommodate the rope – see item 1.3 where direction is explained

—

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- linear manner – takes the same meaning as 1.7. therefore, linear manner means the path of the support rope through the descending device is linear (same restrictions as 1.7 applies to term linear). ✓1

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5.7 “and lowering the load, whereby the user controls the rate of descent of the load by varying the level of friction provided by the device”

- lowering the load – i.e. descending the load from a height above ground level towards ground level
- user – the user that the rope descending device is secured to
- controls – i.e. modifies the frictional force
- varying the level of friction provided by the device
 - no need for controlling by the user raising or lowering the trailing end of the support rope – see page 4, lines 16-17. the process used is different to the figure eight device which varies the rate of descent by changing the angle of the rope – see page 5, line 43 to page 6, line 7
 - rope does not deviate to any notable degree from a linear path as it passes through the device from end-to-end, at least in a side-to-side direction – see page 5, lines 39-40 —
 - can be done by varying the number of rails – see page 5, lines 3-9
 - however, can also be done in any other ways which mean that the angle of the support rope stays linear.
 - is linear at all times as this is the benefit of the invention because this allows the function of reduced twisting and jamming – page 6, lines 4-7.

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Infringement

Embodiments – single slot belaying device and a double slot belaying device

Feature	Feature present in single slot (Y/N)	Reason	Feature present in double slot (Y/N)	Reason
1.1	Y	Includes a delay device for lowering a load – see page 14, line 1 -3. Control – page 11, line 3 and page 11, line 9-10. fallen climber = load. rope – page 11, line 3. Also used by ✓1 descenders – see page 11, line 15/16	Y	same
1.2	Y	Figure 3a has two straight sides and two rounded ends	Y	Figure 2, the plate is a circle, aperture is either of the two slots or cord

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		Single slot or cord hole = inner aperture.		hole. round disk shape – see page 11, line 34
1.3	Y	Page 11, line 22-23 – allow loop of rope to pass through hole. cord hole is also suitable for rope (see page 11. line 28-29) ✓1	Y	same
1.4	Y	Carabiner is a rail as has function of providing friction force - see page 11, line 22- 26. ✓0.5 Must extend across whole width from side to side otherwise it wouldn't work. only has to cross on one face – see figure 3b and page 11, line 33	Y	same
1.5	Y	Page 11, lines 19-21 “the rope is forced into tight bends and rubs ↓	Y	same

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		<p>against the device and/or against itself, 20 allowing the belayer to arrest the descent of a climber in the case of a fall. This rubbing slows the rope.” rubbing = friction provided by contact area. ✓0.5</p>		
1.6	Y	<p>smaller hole /accessory hole/ cord hole – all the same hole and used to attach the device to the climber so it cannot be dropped or lost/ figure 3a and 3b and page 11, lines 28-30 ✓1</p>	Y	same
1.7	Y	<p>Page 11, lines 18-21. When the rope is at the side of the body the rope will be in a straight line path from ↓</p>	Y	Same reasoning

0.5

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		one end of the plate to another – figure 3a. it does not matter that sometimes the rope is bent as it is possible that it can be used just with a linear rope to arrest the descent of climber. —		Cl.1 4/6
Conclusion claim 1		Claim 1 is infringed		Claim 1 is infringed
2.1	Y	C1 infringed	Y	C1 infringed
2.2	N	Caribiner a separate item – see page 11, line 23-25 and figure 3b ✓1	N	Same reasoning
Conclusion Claim 2		Claim 2 not infringed		Claim 2 not infringed
3.1	Y/N	Yes, when dependent on claim 1 No, when dependent on claim 2 —	Y/N	Yes, when dependent on claim 1 No, when dependent on claim 2 —

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3.2	N	Only one carabiner disclosed – see fig 3b and page 11, lines 22-26 ✓1	N	Same
Conclusion claim 3		Claim 3 not infringed		Claim 3 not infringed
4.1	N	Features of claims 2 and 3 not present	N	Features of claims 2 and 3 not present
4.2	Y	Figure 3b shows only carabiner and rope and no other space. ✓1	Y	Figure 3b shows only carabiner and rope and no other space.
Conclusion claim 4		Claim 4 not infringed by virtue of dependency on claim 3.		Claim 4 not infringed by virtue of dependency on claim 3.
5.1	Y/N	Yes, when dependent on claim 1, no when dependent on claims 2-4. Friction brake and it is a bevel see page 11, lines 6-7 ✓1	Y/N	Yes, when dependent on claim 1, no when dependent on claims 2-4 Same reasoning

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5.2	Y	Page 11, lines 29 —	Y	same
5.3	Y	See figure 1, fallen climber on end of rope via an intermediate feature ✓1	Y	same
5.4	Y	One carabiner is a rail ✓0.5	Y	same
5.5	Y	Page 11, lines 25-26	Y	same
5.6	Y	As explained for 1.7 the linear requirement is met when the rope is brought backward to the side of the user – see page 11 line 18-20 —	Y	same
5.7	N	When the delay device is in the “linear” (see 1.7) position the descent of the climber is “arrested” so the climber cannot be lowered. the frictional force cannot be modified in this configuration because it —	Y	The slots could be different sizes for different diameter ropes, e.g. 9mm and 11mm. – see page 11, lines 27-28. This can be varied to provide a varying frictional force —

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		is fixed in the linear mode and must be removed from this to allow the friction to be controlled and the user to move. See page 11, lines 18-21. —		whilst maintaining the linear configuration. —
Conclusion claim 5		Claim 5 not infringed		Claim 5 not infringed

Cl.5 2.5

Conclusion

Single hole: Claim 1 is directly infringed, however, claims 2-5 are not infringed.

Double hole: Claims 1 and 5 are directly infringed, however claims 2-4 are not infringed.

Claim 1, the infringing parties are:

- ClimbSafe - infringing actions are:
 - making/manufacturing – see page 2, line 2 and age 2, line 12 (in Newport Wales) —
 - disposing and offering to dispose / selling the product – see page 2, lines 4-7. because it is your “best selling item” in the UK - the patent protection covers Wales (i.e. part of the UK) —

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- importing – page 2, lines 9-11. making in Bulgaria and importing into the UK —
- The sales outside the UK are not infringements of the UK validated patent, however, I recommend checking where the European patent was validated upon grant as you may also be infringing in these territories (check renewal fees up to date). I recommend seeking advice from local attorneys in each of these separate territories. —
- check whether is it validated in Bulgaria as this is where you were previously manufacturing —
- no defences available —
- UK based retailers
 - they are selling and offering to sell the product —
 - this is a commercial use —
 - check whether they have also received a letter as this could harm your relationships. They cannot be threatened because they are not manufacturers or importers so check whether any threats have been made (permitted communication not a threat). —
- users of the device (e.g. climbers):
 - using the invention
 - could have private, non-commercial use defence is leisure climbers but commercial users e.g. emergency services may not have this exception —

Claim 5, the infringing parties are just users (using and offering to use) of the device (e.g. climbers) since climb safe and retailers would not be using or offering to use the process, themselves. Again, private, non-commercial use defence may apply. —

Conc. ✓0.5 (cl.5?)
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Novelty

Carabiner break (figure 2 of doc A – described as ‘known’ page 3, line 25) and Figure Eight rope-descending device (figure 3 of Doc A and doc C – described as well known since 1980’s, page 2, line 37)) were published before the priority date of the patent and are therefore full prior relevant to both novelty and inventive step. ✓0.5

0.5

Effective priority date

- Claims 1-4 have an effective priority date of the priority date (01.02.2014)
- Claim 5 has an effective priority date of the date of filing (01.02.2015) as claim 5 and supporting description was not present in the priority application as filed.

1

The “world indoor climbing championships” were held on April 2014 which was after the priority date of the invention. Therefore the Youtube Video is fully citable prior art against claim 5 but not claims 1-4. ✓0.5

✓1

0.5

Carabiner break

I will review the Carabiner break in relation to claims 1-4 only as there is no discussion of a method of braking a load on page 3, lines 25-39. In particular there is no disclosure of securing the rope-descending device to a user or a load or lowering the load.

Feature	Feature present in carabiner break	Reason
1.1	Y	Fastening device which functions as break – page 3, line 25 and line 30-31. used for ✓1

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		climbing – page 3, line 26-27, support rope, page 3, line 32	
1.2	Y	Carabiner B, serves as frame, page 3, line 31, fig 2, has unobstructed space.	✓↓
1.3	Y	Rope in aperture in fig 2 and , “looped therethrough” – page 3, line 32	—
1.4	Y	Carabiner A (is a loop shape) and functions as a break (therefore provides friction) – page 3, line 30-31. Frictional force – page 3, line 39 Extends across whole face of carabiner B (figure 2)	✓↓
1.5	Y	functions as a break (therefore provides friction) – page 3, line 30-31. Frictional force – page 3, line 39 There is contact between rope and carabiner A	✓↓
1.6	Y	Carabiner D – “connecting carabiner is used to connect the carabiner frame (B) to the climber” page 3, line 32-33	✓1

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1.7	Y	<p>“In use, the rope passes through the 'frame' carabiner (B)</p> <p>of the device, over the 'brake' carabiner (A), and back through the 'frame' carabiner (B).”</p> <p>page 3, lines 33-34, this type of bending is permitted.</p> <p>Passes from first end of carabiner B to second end – see figure 2.</p> <p>No discussion of side-to-side movement and no notable movement shown in figure 2, ✓1</p>
Conclusion claim 1		Claim 1 is not novel.
2.1	Y	Features of claim 1 present
2.2	N	No discussion of integrally formed and requires two carabiners. ✓0.5
Conclusion Claim 2		Claim 2 is novel.
3.1	Y/N	Yes, when dependent on claim 1. No, when dependent on claim 2. —

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3.2	N	Only one rail as only on carabiner discussed as being used for as a brake – see page 3, line 30-31 ✓0.5	0.5
Conclusion claim 3		Claim 3 is novel.	
4.1	N	Features of claims 2 and 3 not present.	0.5
4.2	N	Width of carabiner A is much less than the size of the aperture. No discussion of changing this. ✓0.5	
Conclusion claim 4		Claim 4 is novel.	

Figure 8

see doc C and page4, lines 1-17 of doc A.

Feature	Feature present in carabiner break	Reason	
1.1	Y	Rope descender device – page 13, line 2 Page 13, line 15-16 – controlling rate of descent ✓1	1

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1.2	Y	Item 3 in figures 1 and 2. pair of rings. these have an unobstructed space in the middle. ✓1
1.3	Y	Shown rode in figure 2 through holes – pag 12, line 9-12 —
1.4	N	The neck is an element which provides friction to the rope – see page 13, line 18-20 and figure 2 However, it does not extend across the width of aperture, because the size of the neck is shown as smaller than the both the rings and the device wouldn't work if it was the same size. ✓1
1.5	Y	The neck is adapted to provide a frictional force – see page 13, lines 15-20 neck <u>not</u> a rail
1.6	Y	See page 13, lines 7-8 ✓1
1.7	N	Path of the rope is not shown as a straight line – i.e. it moves side to side in figure 32 of doc C. Page 4 lines 8 to 10 state: “This is because the line of action of the rope passes through different planes ✓1

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		(in other words, the rope passes above and below the device as well as side to side) as it 10 passes through the device, leading to twisting.” so it moves in side-to side panes. ✓1
Conclusion claim 1		Claim 1 novel Cl 1
2.1	N	Features not present
2.2	Y	Neck is integral to the figure of 8 – see figures and doc C — neck isnt a rail
Conclusion Claim 2		Claim 2 is novel only BVOD on claim 1
3.1	N	Features of claim 1 not present
3.2	N	Only one neck, no disclosure of other necks. — neck isnt a rail
Conclusion claim 3		Claim 3 is novel BVOD of claim 1 and own features
4.1	N	Features of claims 1 and 3 not present.
4.2	N	The neck does not occupy the aperture at all. —
Conclusion claim 4		Claim 4 is novel BVOD of claim 1, 3 and own features
5.1	Y	Page 13, line 2-3, page 13, line 15-20. —

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		Features of claim 1 not present	
5.2	Y	Page 13, line 7-8	—
5.3	N	Not attached to a load – no discussion. user attached to the figure 8	—
5.4	N	No neck across aperture, see previously explanation	✓↓
5.5	Y	Neck provides force, see previous discussion	—
5.6	N	No linear manner, see previous discussion	✓1
5.7	N	No varying of speed without moving in a non-linear way	
Conclusion		Claim 5 novel	

The YouTube video

The youtube video shows a demonstration of how to work the device of the invention.

Need to obtain a copy of the video and check for what it actually discloses. Does it show a copy of the device as shown in claim 1? If so, then claim 5 lacks novelty according to the below table: (Advice)✓1

5.1	Y	Set up the same as figure 1. check whether features of device are present.	—
5.2	Y	Set up same as figure 1 doc B – see page 2, line 23-24. person on ground	✓0.5

1

1

0.5
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2.5

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5.3	Y	Dummy used – page 2, line 24 ✓0.5
5.4	Y	Adding and removing loops – see page 2, line 24-26 ✓1
5.5	Y	Loops are adapted for this purpose according to patent - page 2, line 25 —
5.6	Y	Linear manner probably present if they are using the invention – check video to see device —
5.7	Y	Probably present as they demonstrating varying the control - page 2, line 24-26. check video. ✓0.5
Conclusion		Claim 5 not novel

0.5
1

0.5

1

CONC. ✓1

Nov

16/26

MARKS AWARDED: 16

1

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Inventive step

Inventive step will be assessed from the view of PSA at the priority date of the invention.

Using Pozzoli test.

PSA: a manufacturer of climbing equipment, including rope descending devices and belay devices because page 3, lines 5 to 18 include description that the device can be used for abseiling and belay device is described on page 5, line 35-36.

✓0.5

0.5

CGK includes

- figure eight because it is mentioned in background of patent and is described in client letter as well known since 1980s
- carabiner's as these are common devices used throughout climbing equipment
- the carabiner brake shown in figure 2 is not cgk because there is no evidence that the exact configuration is known well by climbing manufacturers.

I will take embodiment of the figure 8 as the state of the art for claims 1-5 because it is a rope-descending device that is used by climbers (see page 13, line 2) and it therefore has a similar purpose to the claimed in invention.

✓1

1

Claim 1

IC = providing a rail extending across the width of the aperture to maintain a linear path of a rope such that problems with when the support rope is frozen and twisting and jamming can be limited – see page 4, lines 13-19 and page 6 lines 5-7.

✓1

1

Difference between X and claim 1 = the rail does not extend across whole scope of caribiner and no linear movement.

Obvious?

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total

2.5

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The rail does not extend across the whole width of the caribiner and the CGK does not disclose this feature anyway. It would be a great modification to include this in the figure 8 and would entirely change the configuration so PSA wouldn't be minded to do.

The path is not linear and this feature is also not known from cgk. the PSA would not combine with figure 8 because it would not be clear to PSA how to achieve such effect. the fig 8 teaches away from this configuration because it talks specifally about changing the angles and this is the key principle of how the figure 8 works.

Would not combine with the carabiner brake as no motivation to combine this two embodiments and no clear teaching in doc C to do this.

Therefore claim 1 inventive.

Claim 2

IC = integrally formed so the entire rope-descending device may be manufactured as one unit – see page 5, line 27-29. this is beneficial as it is easier to use.

Difference between X and claim 2 = no differences

Obvious? it would be obvious to make it integral because the skilled person would be heavily motivated to do this and the neck is already integral.

Claim 2 not inventive.

Claim 3

IC = with more rails there is greater adaptability provided as different surface area and contact can be provided. more rails increases frictional force – see page 5, lines 10-22.

Difference between X and claim 3 = 2 or 4

✓1

1

—

—

✓1

1

✓1

1

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3

Obvious? the figure 8 only includes one neck, however, the skilled person would be motivated to add additional necks because this would easily provide greater functionality and would not alter the device very much. there is no teaching away to prevent further necks being included. —

Therefore claim 3 not inventive.

Claim 4

IC = substantially all the width is occupied so that the maximum frictional force is achieved page 5, line 21. ✓1

Difference between X and claim 1 = width of rails substantially occupies all the apertures ✓1

Obvious? There is no clear teaching of rails in figure 8 which occupy a whole width, let alone occupying substantially all the aperture. in fact this would appear to be incompatible with the figure 8 because the user control requires flexibility in the amount of material rope in the loop by changing the contact of the loop with the neck – page 13, line 19-20. ✓1

This is significantly far removed.

Therefore, claim 4 inventive.

Claim 5

IC = providing a rail extending across the width of the aperture to maintain a linear path of a rope such that problems with when the support rope is frozen and twisting and jamming can be limited – see page 4, lines 13-19 and page 6 lines 5-7. —

Difference between X and claim 1 =

Obvious?

Inv.

8.5/21

Conc – 0

MARKS AWARDED: 8.5

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Sufficiency

No sufficiency issues identifies.

✓1 Suff (1/1)

1

Obvious errors can be corrected as such and therefore do not pose a threat to sufficiency.

MARKS AWARDED: 1

Amendment

Correct minor errors to the claims including (as mentioned in construction).

proprietor could incorporate claim 4 into claim 1 (basis could be taken from description as claims require dependency on claim 3). This would be valid and infringed.

✓0.5

0.5

amendment, basis, why, valid and infringed

MARKS AWARDED: 0.5

Advice

Doc A is granted and in force. Therefore, infringement proceedings can be brought immediately. I suggest checking that renewal fees have been paid up to date.

why? ✓0.5

0.5

Summary

validity: claim 1 and 4 inventive only

infringement

Single hole: Claim 1 is directly infringed, however, claims 2-5 are not infringed.

Double hole: Claims 1 and 5 are directly infringed, however claims 2-4 are not infringed.

Saving amendment – proprietor could amend to claim 4 as mentioned above.

I recommend taking the following steps: —

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2.5

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- EU and in UK – do other patents exist, need to seek advice in these territories as the advise here only for UK
- see my comments in relation to infringing parties in infringement
- see comments in relation to youtube video – need to see copy and save with the time stamp of upload. important to do this before Ab GmbH realise this could be novelty destroying to claim 5
- Own patent application direct towards having a plate with two holes that are suitable for different types of ropes. this doesn't appear known from the prior art.
- have at home, not innocent infringer, is it marked? —
- letter from german company threat? permitted communication not a threat (e.g. you are able to inform your competitor that a patent exists and give them the number of the patent) —
- they haven't told you about any other patents, therefore, do they exist —
- european patent – see infringement advice, they might use central limitation to amend across all the territories —
- recommend checking priority document in closer detail —

MARKS AWARDED: 1.5

Carry over (1)

Advice (1.5/10)

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