

FD4 – Infringement and Validity
FINAL Mark Scheme 2020

Construction

		Marks
1. A stockless anchor, comprising:	Need to discuss the function of a stock, is “stockless” no stock at all or only no stock at head end? Given reasons What does the stock do (alignment)? P.11, ll.12 - 13	2
a shank (10) having a head end (12) and a crown end (16); and	Terms of art, head and crown relative to attachment to cable or in use position, what does a fluke do? Shank, how defined? P. 3, ll. 28 0 30; p. 4, ll. 9 – 10	1
a fluke arrangement (14) connected to the shank 10 at the crown end (16);	Fluke/fluke arrangement? Allow 2 plates p. 4, ll. 3 – 10	1
characterised in that		
the fluke arrangement (14) includes:	“includes” is open wording, fluke arrangement includes the following features	1
a bill (22) for penetrating the sea bed; and	How does “bill” relate to “fluke” bill is the point of a fluke that first engages & driven into the sea bed p.4 ll. 17 – 18	1
a pair of blades (21) disposed symmetrically on either side of a centre line (24) lying in a plane (x, x', x'', x''') that includes the shank (10);	Must allow more than one bill How does “blade” relate to “fluke arrangement”? p. 3, 31 - 35 Must allow “pair of blades” to be a single piece structure p. 4 , l. 7	1 1

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	Discuss arrangement of blades wrt plane of symmetry p. 4, ll 11 – 13, 20 – 22, 27 - 30 (or in construction of “fluke arrangement” above)	
wherein the distance between the outermost edges of the blades (21) increases from the front to the rear so as to be widest at or close to the rear of the fluke arrangement (14).	Define the widest part (not defined in patent) Width across blades p. 4, ll. 31 – 33 “at or close to (not defined) more than half way/closer to What is “the rear” (not defined in patent)? Opposite end of fluke arrangement to bill; opposite to direction of pull, or equivalent	1 1 1
	Total for claim 1	12
2. An anchor as claimed in claim 1,		
wherein the shank (10) includes an articulated part (18) which is pivotable with respect to the fluke arrangement (14).	Include complete shank pivots wrt fluke arrangement and 2-part construction with pivot part way along	1
	Total for claim 2	1
3. An anchor as claimed in claim 1 or 2,		

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wherein the bill (22) lies on or close to the centre line (24).	“on or close to”, not defined in patent, must include not exactly on center line what is this to achieve? Reduce twisting P. 4, ll. 23 - 25	1 1
	Total for claim 3	2
4. An anchor as claimed in claim 3,		
wherein the fluke arrangement (14') is fixed with respect to the shank (10').	“Fixed” not defined in spec so discuss what this could mean; Only makes sense if “fixed” = “no hinge” (Fig. 4) construe for fixed part of shank only as dependency 1+2+3 makes no sense	1 1
	Total for claim 4	2
5. An anchor as claimed in any preceding claim,		
wherein the blades (21) extend from the centre line (24) and define a central ridge extending to the bill (22).	Extends from: two plates joined along the centre line; single piece construction p.4, ll. 3 – 10 What is a ridge? P. 4, l. 1	1 1
	Total for claim 5	2

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Dependencies	Inc. noting that Cl. 4 Dependency 1+2+3 makes no sense	1
	Total for Construction	20

Infringement

	Bettermore NG	Marks
1. A stockless anchor, comprising:	No stock, nothing at head end of shank, orientation of fluke due to shape of fluke, not separate stock or stabilizer structure	1
a shank (10) having a head end (12) and a crown end (16); and	Identify Shank 52, limbs 52a, 52b ; head and crown ends	1
a fluke arrangement (14) connected to the shank 10 at the crown end (16);	How does Fluke 53 correspond to “fluke arrangement” of claim; tapering plates 56, 57/inside surfaces 59, 60; where is connection to shank?	1
characterised in that		
the fluke arrangement (14) includes:		
a bill (22) for penetrating the sea bed; and	“point of the fluke 53” p. 8, ll. 35 – 36/ identify in Fig. 1 (point of arrow from 53)	1
a pair of blades (21) disposed symmetrically on either side of a	tapering plates 56, 57 consistent with construction of “blades’	1
centre line (24) lying in a plane (x, x’, x”, x”’) that includes the shank (10);	Identify centre line (line between 52b and 53)	1
	Identify plane including shank (plane through bar 52) p. 8, ll 30 – 33	1

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<p>wherein the distance between the outermost edges of the blades (21) increases from the front to the rear so as to be widest at or close to the rear of the fluke arrangement (14).</p>	<p>Width across blades = width between tips of plates 56, 57?</p>	1
	<p>Rear = where 52b connects to fluke 53, Fig. 2,</p>	1
	<p>Tips lie more than ½ way from front to rear, closer to rear than front, Fig. 2</p>	1
	Infringed	
	Total for claim 1	10
<p>2. An anchor as claimed in claim 1, wherein the shank (10) includes an articulated part (18) which is pivotable with respect to the fluke arrangement (14).</p>	<p>shank is bar, p. 8, 29 – 30; Fig. 1 shows nothing that could be a pivot or articulation</p>	1
	Not infringed	
	Total for claim 2	1
<p>3. An anchor as claimed in claim 1 or 2,</p>		

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wherein the bill (22) lies on or close to the centre line (24).	Point of fluke 53 under shank 52 so cannot be seen in Fig. 2 but can infer that it lies on centre line as fluke 53 is symmetric, p. 8, ll 30 – 31, p. 9 l. 5	1
	Infringed when dependent on claim 1, not infringed when dependent on claim 2	1
	Total for claim 3	2
4. An anchor as claimed in claim 3,		
wherein the fluke arrangement (14') is fixed with respect to the shank (10').	Fluke 53 mounted on shank 52, p. 8, l. 32; Fluke 53 cannot move wrt shank 52; Fig. 1	1
	Infringed	
	Total for claim 4	1

5. An anchor as claimed in any preceding claim,		
wherein the blades (21) extend from the centre line (24) and define a	Single fluke 53 described as two plates 56, 57; drawing shows plates symmetrical either side of centre line	1 1

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central ridge extending to the bill (22).	No ridge described or apparent in drawing, concave upward facing surface, p. 8, ll .33- 34	
	Not infringed	
	Total for claim 5	2
Conclusions (including dependencies)	Discussion of Actavis for non-infringed claims	2
	Total for Infringement	20

Novelty

Discussion of Fisherman’s anchor: either not considered as evidently has a stock, or analysis showing novelty due to presence of stock 1

	CGK Stockless anchor (Doc C, p. 11 ll. 14 – 22, Fig. 2)		Doc C (Fig. 3 & 4 = description)	
1. A stockless anchor, comprising:	Fig 2, p. 11, ll. 14 – 15 “no stock at the head end”	1	NO if stock 103 & lateral extension 110 are construed together as the stock and “stockless” = no stock at all Yes if “stockless” = no stock at head end only, or if lateral extensions 110 reasoned as	1

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			optional and stock 103 interpreted as not same as stock of claim	
a shank (10) having a head end (12) and a crown end (16); and a fluke arrangement (14) connected to the shank 10 at the crown end (16);	Shank 1', head end 6', crown end 2' p. 11 ll. 15 - 18 Twin flukes 4'/Unit 3' p. 11, ll. 16 - 17	1	Shank 100, head end 112, crown end 102, p. 11, l. 39 – p. 12, l. 1 flukes 101 connected via “stock” 103 at crown p. 11, l. 40 – p. 12, l. 1	1
characterised in that the fluke arrangement (14) includes:				
a bill (22) for penetrating the sea bed; and a pair of blades (21) disposed symmetrically on either side of a centre line (24) lying in a plane (x, x', x'', x''') that includes the shank (10);	not explicitly disclosed but tip of fluke 4' in Fig. 2 = bill, same function Flukes 4' symmetrical about shank 1', not explicit but can be inferred from Fig. 2	1	Point 105, p. 12, l. 5, p. 12, l. 15 mentions contact of the point 105 with sea bed “twin fluke unit” p. 11, l. 40 Centre line p. 12, l. 16 centre line of “the shank” not explicit but shown in Fig. 4, flukes 101 are symmetric about the shank 112 and therefore about the centre line	1 1 1

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wherein the distance between the outermost edges of the blades (21) increases from the front to the rear so as to be widest at or close to the rear of the fluke arrangement (14).	No - Widest part of fluke 4' less than ½ way toward the rear, not explicit (Fig. 2, widest part that engages sea bed is less than ½ way to rear of unit 3') [consistent with construction]	1	Fluke 101 wider at rear than front (Figs. 3 & 4) Widest point more than ½ way to rear (Fig. 4)	1
	Novel		Novel/Not Novel	
	Sub-total	4	Sub-total	6
2. An anchor as claimed in claim 1,				
wherein the shank (10) includes an articulated part (18) which is pivotable with respect to the fluke arrangement (14).	Unit 3', pivoted at the crown end 2' of shank 1' p. 11, l. 18	1	stock 103 which passes through a hole in the crown 102 and the end of the shank 100 to act as a pivot p. 11, ll. 40 – 41	1
	Novel		Novel/Not Novel (following claim 1)	
	Sub-total	1	Sub-total	1

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3. An anchor as claimed in claim 1 or 2,				
wherein the bill (22) lies on or close to the centre line (24).	NO – refer to Fig 2 showing spaced flukes 4', also p. 11, ll. 20 – 22 discusses twisting problem this feature is trying to solve	1	No - The space between the flukes needs to be large enough that the shank can sit between them p. 12, ll. 16 – 17 Or Yes “keep the spacing between 15 the points 105 of the flukes as small as possible so that contact with the seabed is close to the centre line of the shank.” p.12, ll. 12 - 16	1
	Novel		Novel/Not Novel	
	Sub-total	1	Sub-total	1
4. An anchor as claimed in claim 3,				

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wherein the fluke arrangement (14') is fixed with respect to the shank (10').	NO –(articulated) consistent with claim 2	1	NO- (articulated) consistent with claim 2	1
	Novel		Novel	
	Sub-total	1	Sub-total	1
5. An anchor as claimed in any preceding claim,				
wherein the blades (21) extend from the centre line (24) and define a central ridge extending to the bill (22).	No – Fig 2: separate flukes, no ridge	1	No - The space between the flukes needs to be large enough that the shank can sit between them p. 12, ll. 16 – 17 Cannot have central ridge in plane of shank	1
	Novel		Novel	
	Sub-total	1	Sub-total	1
Conclusions (consistency with construction and conclusions on other claims)				1
			Total for Novelty	20

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Inventive Step

The mark scheme outlined below is one possible line of argument. You should not mark candidates down just because they have followed a different line of argumentation, but awards marks as appropriate consistent with this scheme.

	Marks
Doc C is prior art as published before filing date (may be in Novelty)	1
PSA = designer & manufacturer of anchors for all types of vessels (client's letter mentions commercial shipping and larger vessels; & "ships and other floating vessels" p. 3, ll. 4 - 5)	1
Doc C p. 11, ll. 14 – 22, Figs 1 & 2 are CGK, see client's letter	1
	3

Claim 1	e.g.	Marks
Concept	flukes self-bury and progressively increase drag as anchor buries p. 3, l. 6; p. 4, ll. 30 - 33	
State of the art	Doc C (Figs. 3 & 4, p. 11 l. 23 onwards)	
Difference	P. 12, ll. 19 – 26 proposes use of stock to position fluke to engage and enter ground Difference is either absence of stock completely or absence of stock at head end depending on construction	
Obviousness	Function of stock not relevant to concept	

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	Doc C notes problem of stock at head end “The anchor <u>can</u> be provided with a stock at the after end.” = optional	
	Not inventive	
	Total for claim 1	4
Claim 2	e.g.	
Concept	improved orientation of flukes when setting p. 4, ll. 19 – 23	
State of the Art	Doc C	
Difference	Doc. C P. 12, ll. 19 – 26 proposes use of stock to position fluke to engage and enter ground Doc C also discloses articulation of the shank albeit for different reasons (fold flat for storage). Purpose is not recited in claim so structure not different	
Obviousness	Same as claim 1 because no further difference	
	Not inventive	
	Total for claim 2	3
Claim 3	e.g.	
Concept	To reduce twisting forces p. 4, l. 24	
State of the art	Doc C	

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Difference	Flukes spaced apart to allow shank to sit between them p. 12 ll. 16 – 18	
Obviousness	Doc C indicates keeping spacing to a minimum preferable to reduce twisting p. 12, ll. 12 - 14	
	Not inventive	
	Total for claim 3	4
Claim 4	e.g.	
Concept	Structurally simpler and stronger P. 4 ll. 39 – 40	
State of the art	Doc C	
Difference	flukes fixed wrt shank	
Obviousness	Doc C needs pivot to fold flat when stored and to position when set p. 12, ll. 16 - 18	
	Inventive	
	Total for claim 4	4
Claim 5	e.g.	
Concept	Specific embodiment, no concept indicated p. 4, ll. 3 - 8	
State of the art	Doc C	
Difference	Shape of fluke arrangement	

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Obviousness	Doc C has to allow shank to pass between blades p. 12, ll. 16 - 18 so cannot have a central ridge	
	Inventive	
	Total for claim 5	3
Argumentation	Consistency of arguments between claims and detailed support for conclusions; different outcomes for different dependencies	4
	Total for Inventive Step	25

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Amendment/Sufficiency

No sufficiency issues (explicit)	1
Amendment: Claim 1 + wherein the blades extend from the centre line. 3)	1 (or any other claim that is novel, inventive, and infringed, e.g. claim 3)
Basis: claim 5/ page 5 l. 20 – 25	1
Arguments why amendment without ridge possible	1
Novelty & Inventive Step	1
Total for Amendment/Sufficiency	5

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Advice

Amendment (up to 5)

Amend before contacting Bettermore

Discuss why amendment to claim 4 not desirable (excludes client's main product)

Where to amend?

UK IPO pros/cons

EPO central limitation pros/cons

Impact on licensees

Put Bettermore on notice, threats not an issue, when? (up to 1)

UK IPO opinion on infringement useful for negotiation (up to 2)

Before/after amendment? Why?

How does use on ships/ oil rigs affect infringement position? (up to 1)

General advice relating to litigation and enforcement (up to 1)

Total for Advice 10 Marks