

FD3 Amendment of Specifications

FINAL Mark Scheme 2023

Claims Marks are awarded for the claim set as a whole including main, dependent and any divisional claims	35 Marks
Claim 1:	16 marks
Main Amendment:	
the container (19) being expandable and secured in the upper region of the tank, with a means for filling [the container] with liquid cargo such that the container expands downwards on filling and collapses upwards on emptying.	
Claim can mention effects of the structure if properly presented.	
 Reduced maximum mark for unnecessary limitations, e.g.: Container includes flexible membrane Container includes rigid lid Container is removable Simultaneous filling and emptying Other amendments, if novelty established, e.g.: container when expanded has same shape/volume as tank container contains oil (not ideal for apparatus claim) Broadening claim to tank alone 	max 14 max 12 max 12 max 12 max 10 max 7 max 12
Claim 8:	10 marks
Collapsible container is in the upper region of the tank and is filled/emptied from the top and in such a way that it is always full of liquid cargo/ contains no gas and expands downwards on filling and collapses upwards on emptying. [cover separate filling/emptying operations] Reduced maximum mark for unnecessary limitations, e.g.: - simultaneous filling/emptying - Make dependent on claim 1	8 5
Dependent claims	Up to 9 marks
 Adjustment of existing subclaims (e.g. correction of dependency of claim 3) Add dependent apparatus claims to useful features, e.g.: Rigid lid/cover 15 Material of container 19 Filling pipe 26 in cover Clamped at flange 14 Control means for adjusting flow to make sure membrane is supported Upwardly extending vent tube 28 Entire tank capable of being filled by collapsible container/ container has same volume Tanker has several tanks Add dependent method claims to useful features, e.g.: Cargo and ballast filled/emptied simultaneously so that the membrane is always supported (ballast fills space) Pressurised filling with water to assist unloading oil Occasional cleaning step in between voyages 	

Letter to IPO:		37 marks
- Amendments made a	nd support: claim 1 (3); claim 8 (2); subclaims (3);	8
- Novelty and IS; NB. A	rguments must tally with new claim 1/8:	
- Novelty of claim 1:	D1, D2 – not at top, no downward expansion	6
	D2 – not supported (vertically); expansion sideways	
- Novelty of claim 8:	D1 – cargo space not always filled with oil, no downward expansion D2 – not supported/guided, no downward expansion	5
- Inventive step of clair	n 1:	total 10
 using structured 	approach (PS or Pozzoli); nearest prior art D1; CGK includes sibly such as in D2 (2)	
 discussion of investigation 	entive concept and of prior art, e.g.	
 oil is at all tim 	nes confined within the flexible container; would not fill collapsible D1 with oil as it occupies only a small part of the tank (4)	
 discussion of water (2) 	equivalence or otherwise of the flexible container being filled with oil or	
 Construction 	of D2 very different	
 D1 (or D2) + 	CGK would not arrive at the invention (1)	
 Inventive step of clair 	n 8: vapour problem not addressed, D1 not necessarily simultaneous	total 6
•	ms, e.g. by virtue of dependency, and/or specific points such as	1
	simultaneous filling/emptying	_
 Clarity of presentation 	1	1
Notes for client report:		28 marks
- Discuss why claim 1	needs amendment, validity of Examiner's objections.	4
- Choice of amendme	nt of claim 1:	total 8
	paratus claim not to include cargo/ballast. However, construction with at top allows tank always to be full of liquid.	
	water supporting the membrane in the apparatus claims? But achieved tainer in the upper region.	
- Client letter implie	es cleaning is useful but not vitally important.	
Choice of amendme	nt of claim 8:	total 8
- Here we can clair	n oil in the collapsible container (contrast D1).	
 Filling from above 	enables the container to contain no vapour	
- Client letter implie	es advantageous to fill/empty at same time, maybe not essential	
 NB. Cleaning not 	part of the main claim as such.	
 Split the claim (loa 		
 New dependent clair liquid control means 	ns, likelihood of success of response, fall-back positions, e.g. including in apparatus claim	4
- Miscellaneous: Timi	ng of response; status of prior-art documents, Divisional? non-unity	4