

**2020 FD2 – Preparation of Specifications for United Kingdom Patents**

**FINAL Mark Scheme**

**Introduction and Description**

Title [*½ mark for a title + ½ mark for title to reflect accurately what is claimed*] **1 mark**

Statement of field (technical field of invention) **1 mark**

Prior Art  
 Overview of lids that cannot be used with mugs of varying dimensions ref Figs 1-2. Note that can stretch lids to cover mugs but requires a lot of user effort, is fiddly and dangerous when hot contents are in the mug. Background from which invention is derived [*1 mark*]. **4 marks**

Statements of invention and general description  
 Express statement of what feature of each claim does [*½ mark*] and corresponding advantage [*½ mark*], with a focus on features that are identified in the mark scheme and fall-back options, even when not claimed. **20 marks**

Figures:  
 i) Page numbering on figure pages **1/2 mark**  
 ii) Feature numbering on figures **1/2 mark**  
 iii) Figure description – prior art figures need to be clearly described as such **3 marks**

Specific description:  
 Explanation of how invention works conceptually, including the principle of adjusting the size of a lid via an integral actuation mechanism that enables the lid to engage with a side wall of a vessel [*10 marks*]. Descriptions of both the external-fit lid and internal-fit lid embodiments are required [*3 marks for different structure and operation of internal fit*]. Candidates should describe structure, function and operation for each embodiment and also describe variants, including balloon [*3 marks*]. **16 marks**  
**TOTAL: 46 marks**

**Claims**

Independent apparatus claim **22 marks**

Dependent claims **28 marks**  
**TOTAL: 50 marks**

## 2020 FD2 – Preparation of Specifications for United Kingdom Patents

### FINAL Mark Scheme

#### Abstract

Title (*same as title at top of script*)

1/2 mark

Figure

1/2 mark

Text

- must state: technical field or main use [*1½ mark*], description of main features of the lid [*1 mark*], use of reference numerals [*1/2 mark*] (*ensure content is consistent with claims*)

3 marks

**TOTAL: 4 marks**

**Grand Total = 100 marks**

#### Suggested Claims:

Independent Claim:

A lid for use with a vessel/receptacle [**2 marks**], the lid comprising:

- i) a flexible cover portion having a peripheral part/portion for engaging a (side) wall of the vessel [**4 marks**],
- ii) a(n) (mechanical) actuation mechanism/system that is integral to the lid [**3 marks**], the actuator mechanism including an expander that is mechanically adjustable to (increase and decrease) change the dimensions of the cover portion/size of the lid [**5 marks**],

wherein actuation of the expander by the actuation mechanism allows the peripheral part/portion to engage with the (side) wall of the vessel to secure/seal the lid to the vessel [**6 marks**].

**+ 2 marks for clarity**

**22 marks**

The following examples of mark caps and restrictions apply if unnecessary limitations are included in the claims:

Catastrophic (0 marks)

- Claim not clearly novel – needs to be novel over the mug in Fig 1 and the expansion tab in Fig. 2 (Tupperware lid)
- Cover/lid must have peripheral part/portion/element

Major (max 5 marks)

- Does not include means for adjusting size of the cover portion, or equivalent language
- Claim does not cover all embodiments
- Cover has an opening through which actuation is achieved

Medium (max 10 marks):

- Claim limited to a drinking vessel (i.e. mug, cup, etc.)
- Claim includes drinking vessel.

## 2020 FD2 – Preparation of Specifications for United Kingdom Patents

### FINAL Mark Scheme

Minor (deduct 2 marks each):

- Any unnecessary limitations
- Inclusion of diameter (rather than “dimension”) in claim

The maximum deduction is 22 marks.

**Total: 22 marks**

### Dependent claims

*Marks are halved where dependencies are incorrect.*

- a) an inwardly facing surface of the peripheral portion is configured to engage an outer surface of the (side) wall of the vessel **[2 marks]**.
- b) an outwardly facing surface of the peripheral portion is configured to engage an inner surface of the (side) wall of the vessel **[2 marks]**.
- c) actuation mechanism comprises a threaded mechanism/bore and tapered screw **[2 marks]**  
d) the actuator mechanism comprises an actuator having an integrated screwdriver **[1 mark]** configured to drive the tapered screw **[1 mark]**
- e) the expander comprises a plurality (two or more) of outer walls **[1 mark]** joined to a plurality of inner walls **[1 mark]** via a plurality of radial struts **[1 mark]**  
f) the inner walls are joined together at their lowermost edge in use **[1 mark]**  
g) the inner walls include a/the threaded bore **[1 mark]** configured to receive a/the tapered screw (fastener) **[1 mark]**
- h) the actuation mechanism comprises a balloon **[1 mark]** and a pump configured to inflate the balloon **[1 mark]**  
i) the actuation mechanism further comprises a releasable/resealable valve for deflating the balloon **[1 mark]**  
j) the actuation mechanism further comprises a button configured to be pushed and/or pulled to activate the pump and inflate the balloon **[2 mark]**.
- k) the expander is housed in the cover portion of the lid **[1 mark]**  
l) cover includes an opening for access to the actuation mechanism **[1 mark]**  
m) the cover portion is made from a resilient material **[1 mark]**
- n) the lid/cover portion includes skirt or flange extending radially from the peripheral portion of the cover **[2 marks]**
- o) the lid includes a nozzle integral with the actuator **[1 mark]** configured both to act as a straw and to drive the actuation mechanism **[1 mark]**
- p) A drinking vessel including a lid as claimed in anyone of Claims 1 to o) **[2 mark]**

## 2020 FD2 – Preparation of Specifications for United Kingdom Patents

### FINAL Mark Scheme

**TOTAL = 28 marks**

- Consider whether the pre-amble is correct and whether the claim is in a sensible place in the dependent claims when awarding mark.
- No marks are awarded for trivial claims.
- No or reduced marks should be awarded for claims features written in terms of a method.