QUESTION PAPER REFERENCE: FD3

PERCENTAGE MARK AWARDED: 58%

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Letter to UKIPO	
Dear Sirs,	
We are filing herewith a response to the examination report dated 18 th February 2018, for which the deadline to respond was 18 th June 2018. We are filing a complete new set of claims to replace those currently on file.	
We also request restoration of the application, since the deadline to respond has passed and therefore the application has lapsed and the two-month extension available as of right has also passed. ✓ 1 The application lapsed <u>unintentionally</u> , since the Applicant has been hospitalised for some months until recently, with the doctor ordering complete rest therefore they were unable to work, or attend to this examination report. We are still within 12 months from lapse therefore we submit this request is allowable.	1
Amendments Claim 1 has been amended to include the feature of 'a protruding rim (20)'. Basis for this amendment can be found on page 5, lines 15-18 of the specification.	
Claim 1 has further been amended to include the feature of the rim being "sufficiently stiff" so as to space apart the body and the plane of the ring vertically. Basis for this amendment can be found on page 7, line 21 and lines 27 to 29.	
Claim 1 has been amended to remove 'flat upper surface'. This is not an essential feature and is not described as such anywhere in description therefore it can be removed from the claim.	
New claim 2 has been included to state that the rim is substantially perpendicular to the plane of the disc. Basis for this addition can be found on page 7, lines 20-22.	
New claim 3 has been included to the rim being inclined inwardly up to 45° from the vertical. Basis can be found on page 7, lines 25-27.✓	
Claims 4 to 6 are previous claims 2 to 4 respectively.	

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New claim 7 has been added to the stiching or gluing being on the inside of the disc, support for this amendment can be found on page 7, lines 6-8 of the description. Gluing has support from being implied.	
Claims 8 and 9 are the same as previous claims 5 and 6 respectively.	
New claim 10 to the plug being removable and the open ends being pulled apart in use has implicit basis on page 6, lines 30 to page 7, line 2. ✓ "Reversible" connecting implies that the plug can be removed and the ends pulled apart.	
Claim 11, which is previous claim 7, has been amended to be dependant on previous claims 1 to $8.\sqrt{7/8}$	7
No amendment made is to be construed as abandonment of any subject matter.	
Novelty The present invention as defined in claim 1 as amended is novel over D1. The invention comprises a <u>protruding rim</u> which <u>vertically spaces apart</u> the ring and the body of the flying disc toy due to its stiffness.	
D1 describes a disc having a body portion (30) having an annular frame distanced slightly from the edge of the body to form a skirt (14). The examiner concedes the skirt (14) is equivalent to a rim (20), and may even be construed as a protruding rim (20), however the skirt (14) cannot be said to be vertically spacing apart the body portion (30) and ring (34). ✓ The skirt (14) is specifically described as a "spoiler skirt" to provide lift.	
In contrast, the present invention comprises a rim (20) which protrudes and is sufficiently stiff to space apart the body and the ring, thus resulting in a recessed underside.	
It can be seen clearly from figs 1-5 of D1 that the body (30) is fixed directly onto the ring.	
As such, claim 1 is novel over D1. Dependant claims 2 to 12 are therefore novel in view of D1, by virtue of their dependancy. √ 3/5	3 1
The Examiner concedes that the invention as defined in claim 1 is novel over D2.	

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For completeness, in addition to the distinguishing features as laid out above in relation to D1, the invention is novel over D2 by the fact that it has a flexible ring. ✓ As such claim 1 is novel over D2. Dependant claims 2-12 are novel by virtue of their dependancy on claim 1.	1
Inventive Step Claim 1 is novel over the prior art for the following reasons. Applying the test laid out in Windsurfing ✓ 2/Pozzoli:	2
 Identify the person skilled in the art: This would be a toy manufacturer and/or distributor. Such a person would have common general knowledge which includes rigid disc toys, and the flexible flying disc having weights distributed throughout, as described in the specification on page 4, lines 6-23.√2 	2
 Inventive Concept of the present invention is to provide an improved flexible flying disc toy which is suitable for use indoors with breakable things such as lamps or vases. 	
3. The difference between the disc of D1 and the present invention is laid out in the novelty arguments above. The protruding rim is sufficiently stiff to space the body and the ring of the disc toy apart so as to define a recessed bottom surface. This provides significant enhancement to the aerodynamic properties of the disc. ✓	
Contrastingly, D1, increases the aerodynamic properties by introducing a skirt to spoil the airflow. There is no teaching that increasing the distance between the ring (34) and body (30) would result in better aerodynamic performance. ✓ 3	3
A person skilled in the art, without knowledge of the present invention would not think it obvious to increase the distance between the ring & body for improved aerodynamic performance. D1 clearly shows the body attached directly to the ring, and so teaches away from the present invention.	
Claim 1 differs from D2 by the differences laid out above. D2 describes "rim has a rounded cross-section resembling an airfoil" however nothing further is discussed regarding the rim. This is because D2 is directed to improvements of rigid disc toys, ✓ in particular to their strength-to-weight ratio by using lighter materials but including spoilers 23.	

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D2 does not obviously lead the skilled person to the invention of claim 1. The skilled person is unlikely to look at this document because it relates to rigid, not flexible discs. ✓ If they did, D2 teaches that the inner surface improves lift but it is not taught, nor obvious that this can be applied to the flexible discs without undue experimentation.	2
D1 and D2 in combination would lead the skilled person away from the present invention as defined in claim 1 as the advantageous features of both related to spoiler means.	2
As such claim 1 comprises an inventive step in view of the prior art. Dependant claims 2 to 12 comprise an inventive step in view of the prior art by virtue of their dependancy on inventive claim $1.\sqrt{1}$	1
<u>Clarity</u> Claim 11 (previous claim 7) is now clear as its dependancies have been amended.✓	
We submit the application is now in order for acceptance, and look forward to recieving a positive response in due course.	
Kindest regards,	
Attorney.	
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CLAIMS

1. A flying disc toy having aerodynamic properties so that, when tossed and simultaneously rotated, it will fly in a stable manner, the toy comprising: a disc-shaped body portion (12) of flexible sheet material; a flexible annular frame (16) attached to the periphery of the body portion, the frame being made of plastics material having sufficient elastic memory to be shape-retaining and to stretch the body portion into the disc-shaped configuration, yet being pliable so that the toy can be folded and/or crumpled for storage; the frame being formed of a ring (18) having a rim (20) a protruding rim (20) to which the body portion (12) is attached, wherein the rim (20) is sufficiently stiff so 16/18 that the body (12) is vertically spaced from the plane of the ring (18), whereby the disc toy assumes an unfolded shape with a flat uppersurface and a $\sqrt{5/6}$ recessed undersurface so that it exhibits stable aerodynamic properties when thrown.

Claim 1: 21/24 21

- 42. A flying disc toy as claimed in claim 1, wherein the body portion (12) is made of a fabric on which an advertising or like message (14) may be readily imprinted as by silk screening or other processes.
- 53. A flying disc toy as claimed in claim 1, wherein the body portion (12) is made of a plastics sheet material.
- 64. A flying disc toy as claimed in any preceding claim, wherein the body portion (12) is sewn or glued to the rim.
- 85. A flying disc toy as claimed in any preceding claim, wherein the ring is formed as an annular tube.

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96. A flying disc toy as claimed in any preceding claim, wherein the frame is made from an elongate strip of vinyl material which is cut to a predetermined length, a plug being provided to secure the open tube ends of the ring together in order to form the frame.	
117. A flying disc toy as claimed in any preceding- claim of claims 1 to 8 √1, wherein the frame is made from an elongate strip of vinyl material which is cut to a predetermined length, the ends thereof being glued or heat-welded together in order to form the frame.	
128. A flying disc toy as claimed in any preceding claim and weighing no more than 120g.	
 A flying disc toy according to claim 1, wherein the rim (20) is substantially perpendicular to the plane of the disc. ✓1 	1
 A flying disc toy according to claim 1, wherein the rim is inclined inwardly up to an angle of 45° from the vertical. ✓1 	1
7. a flying disc toy according to claim 6, wherein the stiching or gluing is on the inside of the disc.	
10. A flying disc toy according to claim 9, wherein the plug is removable and the open ends may be pulled apart, in use. $\sqrt{2}$	2
dependent claims: 5/11 Claims: 26	
MARKS AWARDED 26/35	

Client Memo	Examiner's use only
 Expired deadline – we may still apply for restoration which I have done. Please can you gather any evidence of your hospital stays & doctors order covering the span of time you were unable to work. 	
2. Amendments to claims	
Claim 1 – added in 'protruding rim' with 'sufficient stiffness to space ap body & ring'. This is the feature which gives the bowl-shape, y highlighted as important. It is novel over D1, and over D2, as is not flexible as you say.	you
 removed 'flat upper surface' so the claim covers your other embodiments. 	1
New claims 2 & 3 provide us with fall-back positions for the 'bowl-shape feature if Examiner does not agree with us. $\checkmark 1$	e' 1
New claim 7 is a different advantage but may come in useful if 'bowl-shaped' features fail – the stitching/gluing being on the inside provides the advantage of less wear, which neither D1 or D2 show ✓1	2
New claim 10 is a further back-up plan – with the advantage being you c include new covers. ✓1	an
Padded domed surface – unfortunately there is no basis in the application a filed to include this feature as a claim or otherwise. If it has a distinct technic advantage, then we may want to think about either filing a second patent application to just that feature. Must have basis otherwise we will have add subject matter which wasn't there on filing \checkmark 1 which can lead to very comprises and possibly invalidate your patent if it is granted with the added matter.	ical led
<u>D2</u> – You mentioned you did not know why it was being cited. I think because it states it is suitable to recieve printed artwork which yours also does and is flying disc toy. It also mentions that cloth might be a suitable material but go into no further detail. The Examiner has not cited this as novelty destroying, only inventive step relevant – so he believes it is obvious to arrive your invention from D2, but I disagree as you will see from my arguments. $\checkmark 1$	s a oes
<u>Response</u> – I have already submitted the response and attach a copy of it he for you.	ere

Materials – None of the amendments I have made restrict the claims to Vinyl as you say there are other materials which may also be suitable. If it transpires that you want to include the scope of, for example, claims 9, 10 or 11 where the annular ring is vinyl, we can take out vinyl as there is sufficient support in the description for the annular ring to be other materials, e.g. page 5 line 22-25. So if you make it out of new materials, you will still be protected by this patent (once granted). \checkmark 1

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