
Candidate's answer

Dear Sir:

This is in response to the communication under Article 94(3). An amended set of claims is filed herewith to replace the claims currently on file.

Amendments

In the amended claims the following amendments have been made:

Amended Claim 1

Previous claims 1 and 2, which were independent claims, and claim 3, which was dependant from claims 1 and 2, have been combined. The combination of claims 1 and 2 has been made by removing the specific features of the independent claims (a cone shaped shield and a disc shaped shield) and replacing these features with the feature of "a shaped shield having a shape configured for protecting the food." This replacement of the features of claims 1 and 2 does not violate Article 123(2) and is consistent with the Guidelines for Examination C, VI, 5.3.10 because the cone and disc shapes were not explained as essential in the disclosure, the cone and disc shapes are not indispensable for the function of the invention in light of the technical problem the invention serves to solve and the replacement of the cone and disc features with the shape of claim 1 requires no real modification of the other features of the claimed invention to compensate for the change. Further, the modification of the language of claim 1 is supported by the specification of the present application at paragraph 12 for the first embodiment of the invention shown in Fig. 1 and at paragraph 19 for the second embodiment of the invention shown in Fig. 2.

The amended claim 1 has been amended to include a weight sensor which detects whether a weight applied to the guard exceeds a predetermined value and activates the electric motor under this condition. The wording for the amendment of claim 1 is taken from the description at lines 1-3 of paragraph 20 on page 5. Therefore, the subject matter of new independent claim 1 fulfils the requirements of Article 123(2) EPC.

Amended Claim 2

Amended claim 2 is based on the feature of original claim 1 where the shield was cone shaped.

Amended Claim 3

Is based on the feature of original claim 2 where the shield was disc shaped.

Amended Claim 4

Is based on the language of the description provided at paragraph [11].

Amended Claim 6

Is based on the language of the description provided at paragraph [11].

Amended Claim 7

Is based on original claim 5.

Amended Claim 8

Is based on previous claim 6.

Amended Claim 9

Is based on original claim 7.

Amended Claim 10

Is based on original claim 8.

Amended Claim 11

Is based on original claim 9.

Amended Claims 12-15

Are based on the language of the description at paragraph [20], where different driving mechanisms are specified.

Novelty – Article 54

D1 describes a motorized bird feeder for use in a garden. There is no disclosure in D1 of a guard that is rotatable relative to the feeding unit, as provided in amended claim 1. Instead, in both the embodiments of the motorized bird feeder disclosed in D1, the food tray and guard are rotated together. (See D1 at paragraphs [004] and [009].

Therefore, claim 1 is novel over D1.

D2 describes a bird feeder that automatically dispenses food from a food container onto a food tray. There is no disclosure in D2 of a weight sensor which detects whether a weight applied to a food guard exceeds a predetermined value and activates an electric motor under this condition as provided in amended independent claim 1. Instead, D2 teaches rotating a food dispenser according to the weight of the food in the food container and rotating a guard when the container is empty. (See D2 at paragraphs [006] and [007].

Therefore, claim 1 is novel over D2.

D3 describes a bird feeder with a rotatable shield that is rotated in response to a squirrel contacting the rotatable shield. There is no disclosure of an electric motor for rotating the guard or of a weight sensor for activating the electric motor as provided in amended claim 1. Instead in each of the embodiments of the bird feeder provided in D3 (Figs 1-4), the rotatable guard (309, 329) is activated by the squirrel coming into contact with the guard. (See D3 at paragraphs [007] and [0011].

Therefore claim 1 is novel over D3.

Novelty – Article 54

Dependant claims 2-15 are dependent on independent claim 1 and therefore are novel with respect to references D1, D2 and D3 for at least the same reasons that independent claim 1 is novel over the references.

Inventive Step - Article 56

D3 may be taken as the closest prior art as it contains the combination of features in a single reference that constitute the most promising starting point for an obvious development. [See GL, C-IV, 11.7.1]

In particular, D3 is directed to a similar purpose to the claimed invention, *i.e.*, a bird feeder designed to prevent animals, other than birds, from gaining access to the food. Whereas D1 discloses a motorized bird feeder that rotates slowly when a bird is feeding so that the garden owner has a good view of the bird and D2 describes a bird feeder that automatically dispenses food from a container into a food tray.

D1 may also be considered as being the closest prior art because it has the most features in common with the present invention. However, the combination of features of D1 are configured to provide a motorized bird feeder that rotates when a bird is on the feeder to provide for viewing by the garden owner. To provide for this viewing, the bird feeder must be sensitive to the light weights of the birds and most importantly must rotate at a rate that does not disturb the birds or cause food to be thrown off of the tray. (See D1 at paragraph [10]). As such, the bird feeder of D1 is not sensitive to the heavier weights of animals other than birds and cannot provide for dislodging such animals at the slow speeds of the intended use. Furthermore, the guard of D1 is configured to rotate with the feed tray (see D1 at paragraphs [4] and [9]), which means that the birds will be disturbed from feeding if the guard is rotated at a high speed to dislodge an animal.

With respect to D2, like D1, the reference includes a motor for rotating the food dispenser and the guard. However, D2 does not disclose a means for detecting a weight applied to the guard. As such, the guard of D2 is only rotated if the food container in the bird feeder is empty, which is the one time when the presence of an animal at the bird feeder other than a bird is not an issue.

Thus, because D1 and D2 do not concern the same technical problem as the present invention, *i.e.*, protecting food in bird feeders from being eaten by animals other than birds, and because the references D1 and D2 provide no incentive for making changes to address the technical problem of the present invention, *i.e.*, protecting bird food from animals other than birds, D3 is the closest art.

The difference between the present invention and D3 is that the present invention includes an electric motor for rotating the guard and this motor is activated by a weight sensor which detects whether a weight applied to the guard exceeds a predetermined weight and activates the electric motor under this condition.

The technical effect of this difference is that the bird feeder of the present invention will automatically start to rotate, powered by the electric motor and triggered by the weight sensor, when an animal, such as a squirrel, puts its weight on the guard.

The objective technical problem solved is therefore the problem of animals, such as squirrels, learning how to cross a guard without causing the guard to rotate and thereby accessing the food stored in the bird feeder. [See Guidelines C, IV, 11.7.2]. Moreover in the present invention by isolating the rotation of the guard from the feeder tray the disturbance of birds feeding at the feeder is minimized.

Starting from D3 with the objective technical problem in mind, the claimed solution is obvious in light of the prior art. Specifically, it cannot be said that the skilled person would, not simply could, have modified the bird feeder of D3 to arrive at the claimed invention in order to solve the objective technical problem while taking the prior art into account (GL, C-IV, 11.7.3).

Starting from D3 alone, the skilled person would not have thought of motorizing the guard and triggering the guard based on an interaction of the guard with an animal because there is no suggestion that animals might learn how to avoid causing a passive rotating guard to rotate. Without an understanding of the technical problem a skilled person would not modify the bird feeder of D3 in the manner described in amended claim 1. Furthermore, without an understanding of the problem the skilled person would not look for additional trigger means to trigger rotation of the guard.

Finally, D3 does not teach or suggest all of the features of the invention of claim 1 and by providing a bird feeder that purports to give the solution to the problem of animals other than birds feeding from the feeder, the reference provides no incentive to a skilled person to modify the described bird feeder.

D3 in Combination with D1

Although it is permissible to combine prior art documents for the purpose of inventive step [GL C-IV, 11.8], the skilled person would be unlikely to consider D1 because it is inherently incompatible with the bird feeder of D3. The bird feeder of D1 comprises a guard and a feeding tray, which rotate together slowly. By contrast, the guard of D3 is independently rotatable. By continuously rotating the guard with the feed tray as provided in D1, the sudden rotation of the guard necessary to dislodge an animal may be prevented. Moreover, by rotating the guard and food tray together any rotation of the guard caused by an animal will rotate the feed tray and disturb the feeding birds making the feed tray undesirable to feeding birds.

Even if the disclosures of D3 and D1 were combined the combination would provide a bird feeder with a rotating feed tray where birds could be easily viewed, with an independently rotating guard that would guard against animals by rotating when the animals caused the guard to rotate. The combination would not provide a guard that rotated by an electric motor when a weight of an animal on the guard exceeds a specified weight. As such, even if the skilled person combined D1 and D3, he would not arrive at the invention of claim 1.

Applicants note that the motorized bird feeders of both embodiments of D1, as provided in Figs. 1 and 2, operate in essentially the same manner with the feed tray and the guard being caused to rotate when a bird is on the feed tray. As such, neither the combination of D1,1 or D1,2 with D3 provide the bird feeder of the claimed invention of claim 1, where the guard is caused to rotate when an animal with a weight above a specified weight is detected on the guard.

D3 in Combination with D2

D3 is inherently incompatible with D2. The disclosure D2 describes a bird feeder that automatically dispenses food. The bird food dispenser of D2 is caused to rotate and dispense food when the weight of food in the D2 is less than a predefined value. When the food dispenser rotates the guard also rotates. (See D3 at paragraph [007]). As such, if the bird feeder of D2 were combined with D3 the bird feeder would actually dispense food when an animal caused the guard to rotate. This would have the effect of

encouraging animals other than birds to come to the bird feeder as the dispenser may fall from the feeder where it may be consumed by the animal.

Furthermore, D2 addresses the technical problem of keeping a bird feeder full of food as the food is eaten by the birds. As such, it provides no incentive to a person skilled in the art to utilize the teachings of D2 to solve the problem of the present invention of animals learning how to access a bird feeder without causing rotation of a rotating guard.

Even if the skilled person were to combine D3 and D2, the result would be a bird feeder with a rotating guard that rotates when an animal sets it in motion and that automatically dispenses bird food as the birds eat the food in the food tray. The combination does not comprise the invention of independent claim 1 of the present invention.

Essentially references D1 and D2 are silent with regard to the technical problem addressed by the invention of claim 1. As such they provide no guidance to the skilled person. Moreover, by describing systems that are mechanically rotated to provide for bird viewing and food dispensing, they teach away from the invention of claim 1 as rotation of the food tray in D1 and dispensing of food in D2 would be undesirable effects of the powered rotation of the guards in both bird feeders.

In summary, the claimed invention provides a bird feeder that has a guard that is rotated by a motor when an animal of a weight above a predetermined weight is sensed on the guard and this prevents such animals learning how to get around a rotatable guard without causing it to rotate. This is not taught or suggested by any of the references D1, D2 and D3 whether considered individually or in combination.

Clarity

Regarding Claim 4, this claim has been amended in the amended listing of claims and is now claims 5 and 6. As amended a speed of rotation of the guard (claim 5) and a weight of the animal (claim 6) has been defined to address the clarity issue raised in the communication.

Conclusion

It is submitted that the application is now in order for allowance. In the event that the Examining Division intends to refuse the application oral proceedings are requested hereby.

Yours Faithfully,
Authorized Representative

Claims

1. A bird feeder (1, 21) comprising:

a feeding unit (2, 22) for holding bird food;

a guard (9, 29) comprising a shaped shield (9a, 29a) having a shape configured for protecting the food;

an electric motor (13, 33) for rotating the guard (9, 29), wherein the guard (9, 29) is rotatable relative to the feeding unit (2, 22);

characterized in that the bird feeder (1, 21) further comprises

a weight sensor (12, 14, 32, 34) which detects whether a weight applied to the guard (9, 29) exceeds a predetermined value and activates the electric motor (13, 33) under this condition.

2. A bird feeder (1, 21) according to claim 1, wherein the shaped shield (9a, 29a) comprises a cone shaped shield (9a).

3. A bird feeder (1, 21) according to claim 1, wherein the shaped shield (9a, 29a) comprises a disc shaped shield (29a).

4. A bird feeder (1, 21) according to claim 1, wherein the shaped shield (9a, 29a) comprises a hemi-spherical shaped shield.

5. A bird feeder (1, 21) according to any of the preceding claims, wherein the guard (9, 29) is rotatable at a speed of 30-35 revolutions per minute.

6. A bird feeder (1, 21) according to any of the preceding claims, wherein the guard (9, 29) is rotatable at a speed suitable for making a squirrel weighing more than 250g slip or jump off of the shield (9a, 29a).

7. A bird feeder (1, 21) according to any of the preceding claims, wherein the weight sensor (12, 14, 32, 34) comprises a switch (12, 32) and a spring (14, 34).

8. A bird feeder (1, 21) according to any of the preceding claims, comprising a motor speed controller for adjusting the guard rotation speed.

9. A bird feeder (1, 21) according to any previous claim wherein the feeding unit (2, 22) comprises a food container (3).

10. A bird feeder (1, 21) according to any previous claim, further comprising a ring (10) for suspending the bird feeder (1, 21).

11. A bird feeder (1, 21) according to any one of claims 1 to 10 further having means for fixing the bird feeder (1, 21) to a pole.

12. A bird feeder (1, 21) according to any of the preceding claims, wherein a transmission (15, 35, 9c, 29c) is used for driving the guard (9, 29).

13. A bird feeder (1, 21) according to claim 12 wherein the transmission comprises a gear transmission.

14. A bird feeder (1, 21) according to claim 12 wherein the transmission comprises a belt transmission.
15. A bird feeder (1, 21) according to claim 12, wherein the transmission comprises a chain transmission.

EXAMINATION COMMITTEE I

Candidate No.

Paper B (Electricity/Mechanics) 2010 - Marking Sheet

Category		Maximum possible	Marks awarded	
			Marker	Marker
Claims	Independent	36	34	34
	Dependent	14	12	12
Arguments	Basis for Amendments	14	13	12
	Clarity	2	2	1
	Novelty	6	6	6
	Inventive Step	28	26	25
Total		100	93	90

Examination Committee I agrees on 92 marks and recommends the following grade to the Examination Board:

PASS
(50-100)

COMPENSABLE FAIL
(45-49)

FAIL
(0-44)

02 July 2010

Chairman of Examination Committee I