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DESCRIPTION

TECHNICAL FIELD

[0001] The present invention relates to a toy for motivating or training a pet, comprising a first outer shell section and a second outer shell section, said first and second shell sections being arranged to create a space between themselves, and further comprising an entry opening and at least one exit opening, each of said entry and exit openings being arranged to connect said space to a surrounding of said toy. The invention also relates to a method for motivating or training a pet.

BACKGROUND ART

[0002] The training of pets such as dogs or cats is a popular hobby or profession, but the proper tools for performing such training have been known to be scarce and/or suffering from lack of suitability for the pets in question. One known form of training, especially popular for training dogs but also suitable for other types of animals, is a toy where a number of treats are placed into an opening and the pet by manipulating the toy can make the treats appear again through another opening and thereby receive a reward for playing with the toy.

[0003] One such toy is known from US5758604, where a cubic toy has an entry opening for insertion of a treat and an internal spiral shaped path that leads to an exit opening on a side of the cube that is directly opposite that of the entry opening. This toy is, however, difficult to manoeuvre by the pet due to its shape and does not in the long run stimulate the pet enough.

[0004] Another toy is shown by WO2007149318, where the same basic principle is applied to a toy of a rounded shape that can be more easily handled by a pet for allowing a treat to slide along a spiral shaped path. The challenge to the pet is, however, limited since practically any kind of manipulation of the toy will result in the treat emerging from the exit opening. Rather than learning a technique that will give the desired result, the pet has only to pat the toy in a random way until the treat can be reached and eaten, and thanks to gravity the treat could even emerge by its own volition if the friction along the spiral path is low.

[0005] Further toys are known from DE 20 2006 011 458 U1 and US 6073581 A1.

[0006] It is therefore evident that there is a need for a more stimulating toy for pets that present more of a challenge to the pet while at the same time enabling a clear reward for a desired behaviour.

DISCLOSURE OF THE INVENTION

[0007] The object of the present invention is to fulfil the objects set forth above. This is achieved through a toy for motivating or training a pet, according to claim 1, and through a method for motivating or training a pet, according to claim 9.

[0008] According to a preferred aspect of the invention said first outer shell section comprises a peripheral outer edge extending in one plane interrupted by at least one cut out forming said exit opening.

[0009] According to a further preferred aspect of the invention, at least one outer shell section is arcuate. Thereby, the toy can be more easily manipulated by the pet, resulting in an improved transportation of a treat from an entry opening to an exit opening.

[0010] According to another preferred aspect of the invention, said toy comprises at least two exit openings. Thereby, playing with the toy can be made more unpredictable and stimulating to the pet, since there are more than one location where a treat can emerge if the correct way of playing with the toy is employed.

[0011] According to a further preferred aspect of the invention, both shell sections are arcuate. Thereby, the playing with the toy can continue even if the toy is turned upside down, since the manipulating of the toy can be performed in a simplified way for the pet.

[0012] According to the invention a middle section, flat shaped, is placed between the two shell sections, dividing said space into two halves. In a preferred embodiment said middle section is arranged with first attachment means arranged to allow attachment

of at least one, preferably both, of said shell sections by means of second attachment means arranged on said shell section/s, whereby the advantage is obtained that exactly the same production mould may be used for both shell sections, i.e. both shell sections using the same attachment interface in relation to the middle section.

[0013] According to yet another preferred aspect of the invention, said toy is arranged onto another toy in such a way that the second outer shell section of a first of the toys also serves as the second outer shell section of the second toy. Thereby, treats can be inserted from two different directions into the toy and can emerge in the different exits of each toy, giving a more complex toy and more possibilities of reward for the pet, since playing with either side can cause the emergence of a treat.

[0014] Further advantages will become apparent from the following more detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] The invention will now be described in more detail with reference to the appended drawings, wherein

Fig. 1 shows a perspective view of a toy for a pet according to a preferred embodiment of the invention,

Fig. 2 shows a planar view from the side of the toy of Fig. 1,

Fig. 3 shows an exploded view of the toy of Fig. 1 and 2,

Fig. 4 shows a planar view from above of the toy of Fig. 1-3, and

Figs 5A - 5D show a variety of possible ridge formations.

DETAILED DESCRIPTION OF THE INVENTION

[0016] In Figs 1 and 2, a toy 1 for a pet according to a preferred embodiment of the invention can be seen, with a first outer shell section 2, an intermediate flat shaped, circular, wall 4, and a second outer shell section 2', preferably having the same design as the first shell section 2. Each outer shell section 2, 2' comprises a centrally positioned entry opening 21 and a series of peripheral exit openings 22, 23, 24. Thanks to relative sizes of the outer shell sections 2, 2' and the middle section 4, an outer boundary of the middle section 4 in the form of an edge 25 also serves as an outer boundary for the shell sections 2, 2'.

[0017] Fig. 2 shows a side view of the toy 1 of Fig. 1, where the first outer shell section 2 along with one of the exit openings 23 is shown mounted onto the middle section 4 with the edge 25. On the opposite side of the middle section 4, the second outer shell section 2' is mounted, in shape and size preferably corresponding to the first outer shell section 2 and thus comprising an entry opening 21' and a number of exit openings 22', 23', 24', one of which is shown in Figure 2.

[0018] It can now be appreciated that the first outer shell section 2 and the second outer shell section 2' are arcuate in shape, i.e. having outer shell portions 27, 27' forming spherical segments, in such a way that they each have an essentially circular circumferential edge 28, 28', wherein the openings 22 - 24' are formed by means of U-shaped cut outs. Each shell 2, 2' that is mounted onto the middle section 4 from opposite directions and extend symmetrically up- or downwards towards a highest or lowest point placed in the centre of the first and second outer shell section 2, 2'. In this point, the entry openings 21, 21' are placed. When the first and second outer shell sections 2, 2' are mounted onto the middle section 4, a space is created between said middle section 4 and each of the first and second outer shell sections 2, 2'.

[0019] Fig. 3 shows an exploded view of the toy 1 of Fig. 1 and 2, with a first outer shell section 2 showing the entry opening 21 in the centre and two of the exit openings 22, 23 placed at a circumference of the first outer shell section 2. Underneath is the middle section 4 with the edge 25 and a number of mounting holes 41, 41'. Further below, the second outer shell section 2' is shown, with the entry opening 21' placed at the centre and the exit openings 21', 22', 23' around the circumference. Also shown in the space created by the arcuate shape of the outer shell portions 27, 27' are a plurality of ridges 32' that are provided on an inside of said outer shell portions 27, 27' extending, substantially in level with the circumferential edge 28' to essentially abut against a surface of the middle section 4 when the second outer shell section 2' is mounted onto said middle section 4. The entry opening 21' comprises a raised section 29', for instance in the form of a tube shaped portion 29', that extends into the inner space, a shorter distance than the ridges 32', to terminate at a distance from the middle section 4. The ridges 32' are preferably

formed by means of a plurality of concentric ring segments 32'A - 32'C, one inner group 32'A at a first radius comprising three segments 32'A with opening 34' in between, etc. The first shell section preferably is designed in exactly the same way, and therefore in the following merely the second shell section 2' is described in more detail.

[0020] Said ridges 32' together form a maze pattern that is distributed in the space between the middle section 4 and the second outer shell section 2' in such a way that at least one path is available from the entry opening 21' to each of the exit openings 22', 23', 24', preferably a plurality of paths to each of the exit openings 22', 23', 24'. Also shown on the surface of the second outer shell section 2' is a mounting ridge 31' with a plurality of pins (not shown) that are arranged to fit into every second mounting hole 41' of the middle section 4. When mounting the second outer shell section 2' onto the middle section 4, the pins are simply inserted into the mounting holes 41 to make the second outer shell section 2' fit directly onto the middle section 4.

[0021] It is to be understood that the first outer shell section 2 has a similar configuration to that shown and described with reference to the second outer shell section 2' and can be mounted onto the other side of the middle section 4 in a similar manner, by means of having its pins (not shown) fitting into some of the available holes 41. Accordingly the middle section preferably is arranged with at least two times the number of holes 41, 41' with regard to the number of pins 41 and 41' respectively on each section 2, 2'. The resulting toy 1 is shown from above in Fig. 4 and illustrates the principle of a single entry opening 21 and a plurality of exit openings 22, 23, 24. The mounting ridge 31 and the ridges 32 may be seen through the outer portion 27 of the first outer shell section 2 in a preferred embodiment thanks to a transparency of the material and serve to illustrate a structure of the maze created inside the toy.

[0022] The operation of the toy will now be described with reference to the Figures.

[0023] Before a pet such as a dog is allowed to play with the toy 1, a human owner loads a number of small desirable objects such as treats into one or both of the entry openings 21, 21' and places the toy 1 in the vicinity of the pet. The pet can now play with the toy and manipulate it by touching it and turning it in different directions, which will allow the treats inside move around along different paths of the labyrinth until they emerge one by one through any of the exit openings 22, 23, 24, 22', 23', 24'. Thanks to the arcuate shapes of the first and second outer shell sections 2, 2', the pet can easily move the treats along the maze by pushing the toy 1 down by placing a paw onto it or standing on it so that a slope downwards from the entry opening 21, 21' to one of the exit openings 22, 23, 24, 22', 23', 24'. When the toy 1 is left alone it will thanks to its shape resume a position with an entry opening 21, 21' as its lowest point against a floor on which the pet is playing. In this position, the treats may slide back towards the entry opening 21, 21' thus preventing them from falling out of the toy through one of the exit openings 22, 23, 24, 22', 23', 24' if the pet is not actively guiding them towards such an exit, and thanks to a raised section extending from the entry openings 21, 21' and into the interior of the toy 1, an accidental emergence of a treat through the entry openings 21, 21' can also be prevented. Thus, the pet must actively play with the toy 1 in order to dislodge a treat and eat it, and this further increases a motivational effect of the toy 1.

[0024] Thanks to its symmetrical shape, the toy 1 can still be played with if it should be placed upside down and there are treats in both mazes, and thereby the pet does not need a human to help with correcting the position of the toy 1 but can keep playing uninterrupted.

[0025] The toy 1 is preferably made from an essentially unflexible material such as a hard plastic, for instance a PP plastic, in order to allow for easy cleaning and good durability. The edge 25, the outer circumference of the first and second outer shell sections 2, 2' along with an area around the entry openings 21, 21' can be made from a softer plastic material such as a TPE plastic to allow for a noise reduction as the pet plays with the toy 1 on a hard floor and the like. It is to be noted, however, that many other materials can also be suitable for construction of the toy 1, such as other types of plastics, rubber or metal. Combinations of materials, such as parts of the toy 1 comprising one material and other parts comprising another can also be suitable.

[0026] The shape of the toy 1 can be adapted according to the needs and preferences of any particular pet or type of pets. Suitable shapes include those with a circular edge, such as the preferred embodiment described above, but also elliptical, triangular, quadratic, pentagonal and octagonal edge, for instance. In Figs. 5A - 5D there is shown a plurality of different possible designs of the ridges 32, wherein is indicated that by varying the form of the ridges and the number of (preferably concentric) ridge formations 32A - 32D the complexity of the toy may be varied within a wide range.

[0027] One suitable size for a toy 1 is with a diameter of 20-30 cm, preferably about 23-27 cm, more preferably 24-26 cm of the middle section 4 and a height of 5-15 cm, preferably about 7-12 cm, more preferably 8-10 cm from the entry opening 21 of the first outer shell section 2 to the entry opening 21' of the second outer shell section 2'. Suitable sizes for the entry and exit openings can be a radius of 1-3 cm, more preferably about 2 cm for the entry opening 21 and a width of 1-5 cm, preferably 2-4

cm, more preferably 3 cm and depth of 1-4 cm, preferably 2-3 cm, more preferably 2,5 cm for each of the exit openings 22, 23, 24. The sizes of the openings 21, 22, 23, 24 can be adapted to fit different types of treats for the pet, so that treats commercially available on different markets and for different types of animals can be used with the toy 1. It is important to prevent treats from getting stuck inside the toy 1, so therefore it can be beneficial to design the exit openings 22, 23, 24 to be larger than the entry opening 21, to ensure that anything that can be put into the toy 1 can also be let out through the exit openings 22, 23, 24. For the same reason, it can be beneficial for the openings in the maze inside the toy 1 to be adapted to let larger objects through than can be inserted through the entry opening 21.

[0028] In an alternative embodiment a connection between the two mazes created by the ridges 32, 32' can be conceived, as well as a removal of the middle section 4 so that only one maze is available inside the toy 1. Conversely, three or more mazes can be constructed inside the toy 1 to further increase the level of difficulty to the pet, and the number of entry and exit openings can be varied according to the requirements of specific pets.

[0029] In another alternative embodiment, one of the outer shell sections 2, 2' can be removed to provide a maze between one outer shell section 2, 2' and the middle section 4, but in this embodiment the pet would not be able to play with the toy 1 if it should be turned with the middle section 4 facing downwards.

[0030] The invention is not to be seen as limited by the embodiments described above, but can be varied within the scope of the appended claims, as will become readily apparent to the person skilled in the art. For instance, the toy can comprise only one entry opening and one exit opening, or said entry and exit openings can be one and the same.

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- [US5758604A \[0003\]](#)
- [WO2007149318A \[0004\]](#)
- [DE202006011458U1 \[0005\]](#)
- [US6073581A1 \[0005\]](#)

Patentkrav

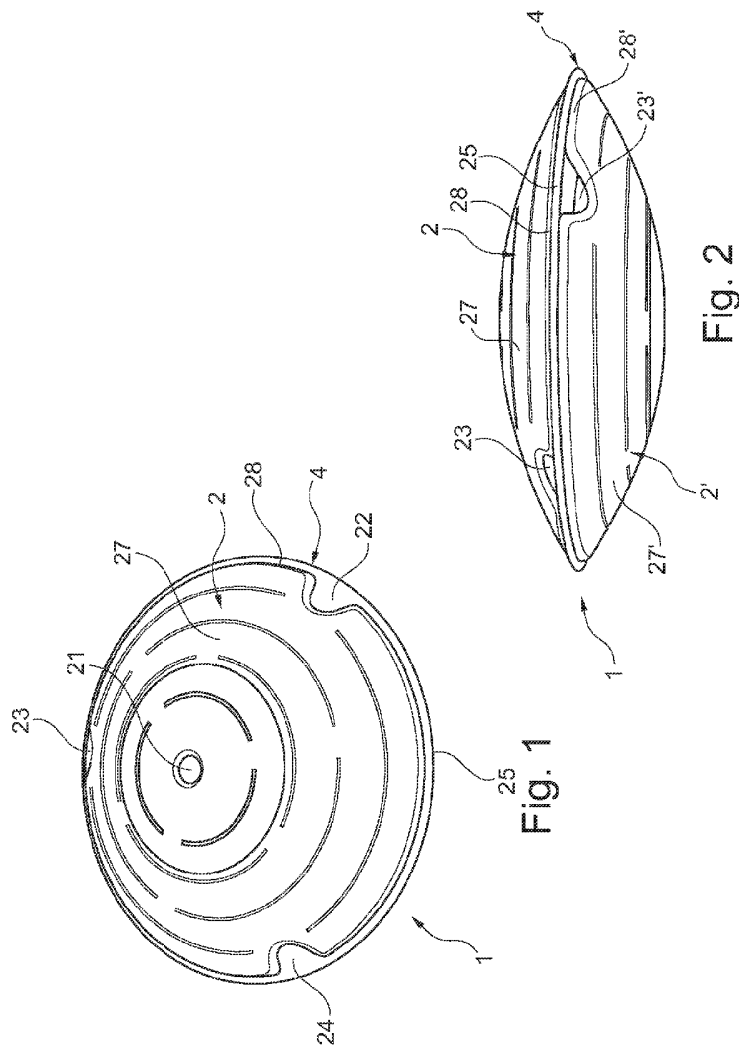
1. Legetøj til motivering eller træning af et kæledyr, omfattende en første ydre skalsektion (2) og en anden ydre skalsektion (2'), hvilke første og anden ydre skalsektioner (2,2') er indrettet til at skabe et rum mellem sig, og yderligere omfattere en indgangsåbning (21, 21'), der fortrinsvis omfatter en hævet sektion (29, 29'), der strækker sig ind i rummet, og nævnte legetøj også omfatter mindst en udgangsåbning (22-24'), hvor hver af nævnte indgangs- og udgangsåbninger (22-24') er indrettet til at forbinde nævnte rum til en omgivelse af nævnte legetøj (1), hvor legetøjet yderligere omfatter mindst en ribbe (32), fortrinsvis fastgjort til nævnte skalsektion (2, 2'), hvor nævnte ribbe definerer en begrænset tværgående åbning, **kendetegnet ved** en flad-formet midtersektion (4), der er anbragt mellem den første ydre skalsektion (2) og den anden ydre skalsektion (2'), og som opdeler rummet i to halvdele, og hvor henholdsvis nævnte ribbe (32) og nævnte begrænsede tværgående åbning er indrettet til at tilvejebringe en labyrintlignende bane for tværgående bevægelse af en genstand fra nævnte indgangsåbning (21, 21') til udgangsåbningen (22-24').
2. Legetøj ifølge krav 1, omfattende mindst en ribbeformation (32A-32D) med en flerhed af ribbe (32) symmetrisk fordelt i forhold til en symmetrilinie, der passerer gennem centrum af skalsektionen (2, 2'), hvori der fortrinsvis er anbragt mindst to ribbeformationer (32A-32D) ved forskellige afstande i forhold til centrum af skalsektionen (2, 2').
3. Legetøj ifølge ethvert af kravene 1-2, hvor den første ydre skalsektion (2, 2') omfatter en perifer udvendig kant (28), der strækker sig i et plan afbrudt af mindst én udskæring (22-24), der danner nævnte udgangsåbning (22-24').
4. Legetøj ifølge krav 3, hvor den første ydre skalsektion (2, 2') omfatter en bueformet skaldel (27, 27'), hvor fortrinsvis den anden ydre skalsektion (2') også omfatter en bueformet skaldel (27, 27').

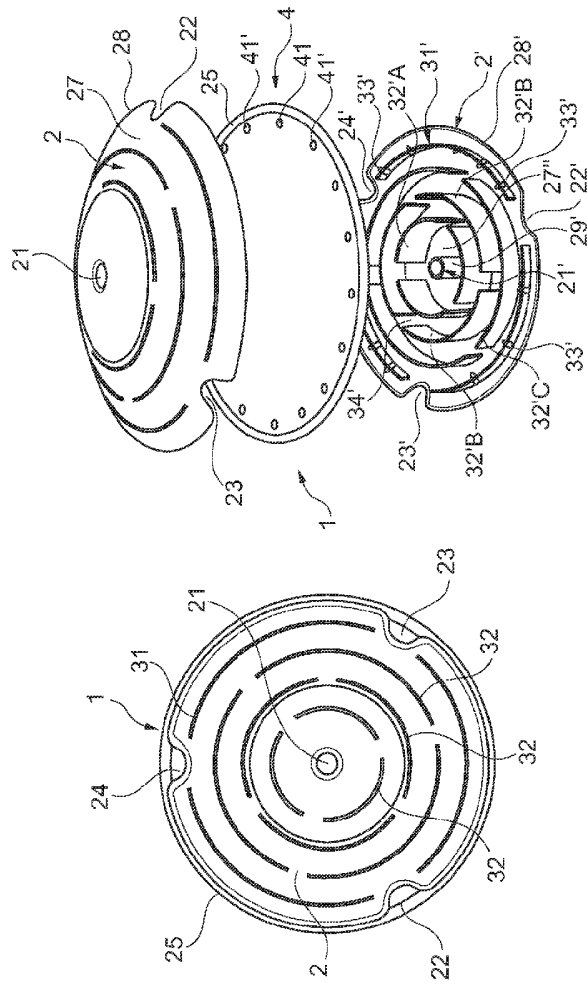
5. Legetøj ifølge ethvert foregående krav, hvor legetøjet (1) omfatter mindst to udgangsåbninger (22-24'), hvor fortrinsvis hver skalsektion (2, 2') omfatter mindst to udgangsåbninger.
- 5 6. Legetøj ifølge ethvert foregående krav, hvor midtersektionen (4) er indrettet med første fastgørelsesmidler (41,41'), der er indrettet til at tillade fastgørelse af mindst en, fortrinsvis begge, af nævnte skalsektioner (2, 2') ved hjælp af andet fastgørelsesmidler indrettet på nævnte skalsektion/er (2, 2').
- 10 7. Legetøj ifølge krav 3 og 4, hvor skalsektionen (2, 2') omfatter en hævet sektion (29, 29'), der danner en forlængelse af nævnte indgangsåbning (21, 21') ind i rummet og også omfattende mindst en ribbe (32), der også strækker sig ind i rummet, hvor nævnte hævede sektion (29, 29') ender ved et niveau længere væk fra niveauet for kanten (28,28') af skalsektionen (2, 2') end enden af ribben (32).
- 15 8. Legetøj ifølge ethvert af de foregående krav, hvilket legetøj (1) er indrettet til at tilvejebringe mindst to forskellige baner gennem nævnte rum fra nævnte indgangsåbning (21, 21') til udgangsåbningen (22-24').
- 20 9. Fremgangsmåde til motivering eller træning af et kæledyr ved anvendelse af et legetøj (1), hvor legetøjet (1) omfatter en første ydre skalsektion (2) og en anden ydre skalsektion (2'), hvilke første og anden skalsektioner (2, 2') er indrettet til at skabe et rum mellem sig selv, og hvor legetøjet yderligere omfatter en indgangsåbning (21,21') og mindst én udgangsåbning (22, 23, 24, 22', 23', 24'),
- 25 hvor hver af nævnte indgangs- og udgangsåbninger (21, 21', 22, 22', 23, 23', 24, 24') er indrettet til at forbinde nævnte rum til en omgivelse af nævnte legetøj (1) og nævnte legetøj (1), hvor nævnte legetøj (1) tilvejebringes med mindst en ribbe (32), fortrinsvis fastgjort til skalsektionen (2, 2'), hvilken ribbe definerer en begrænset tværgående åbning, og hvor der tilvejebringes en flad-formet
- 30 midtersektion (4), der er placeret mellem den første ydre skalsektion (2) og den anden ydre skalsektion (2'), og som opdeler rummet i to halvdele, hvor henholdsvis nævnte ribbe (32) og åbning er indrettet til at tilvejebringe en labyrintlignende bane for tværgående bevægelse af en genstand fra nævnte

indgangsåbning (21, 21') til udgangsåbningen (22, 23, 24, 22', 23', 24') og ved at omfatte trinene at placere mindst en lille genstand, der appellerer til et kæledyr ind i nævnte indgangsåbning (21, 21'), og præsentere nævnte legetøj (1) indeholdende den mindst ene lille genstand til et kæledyr, hvor legetøjet er

5 forsynet med mindst to forskellige baner gennem nævnte rum fra nævnte indgangsåbning (21, 21') til nævnte udgangsåbning (22, 23, 24, 22', 23', 24').

DRAWINGS





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Fig. 4

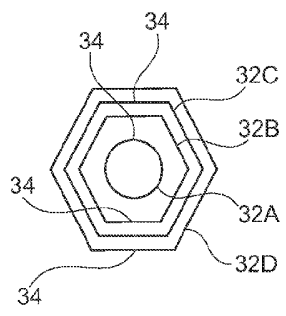


Fig. 5A

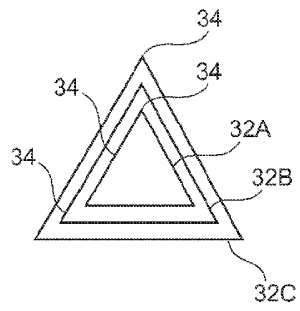


Fig. 5B

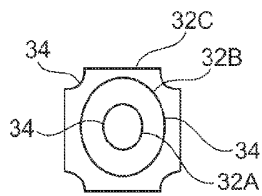


Fig. 5C

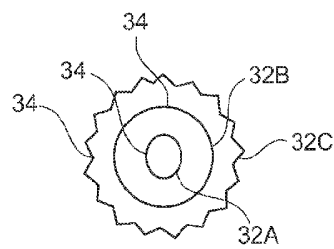


Fig. 5D