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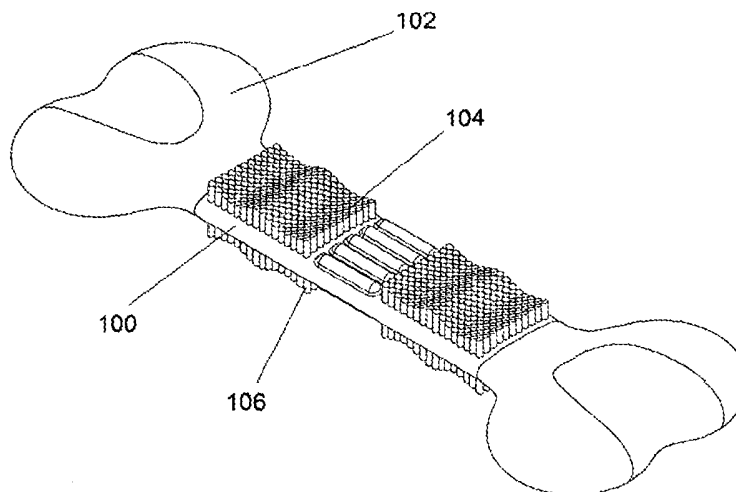
(56) Documents Cited:
GB 2457665 A **JP 2007160073 A**
US 6739287 B1 **US 6116191 A**
US 5033410 A **US 20070101946 A1**
US 20060102099 A1

(58) Field of Search:
INT CL **A01K, A46B**
Other: **Online: WPI & EPODOC**

(54) Title of the Invention: **Dog tooth brush**
Abstract Title: **Apparatus for cleaning the teeth of an animal**

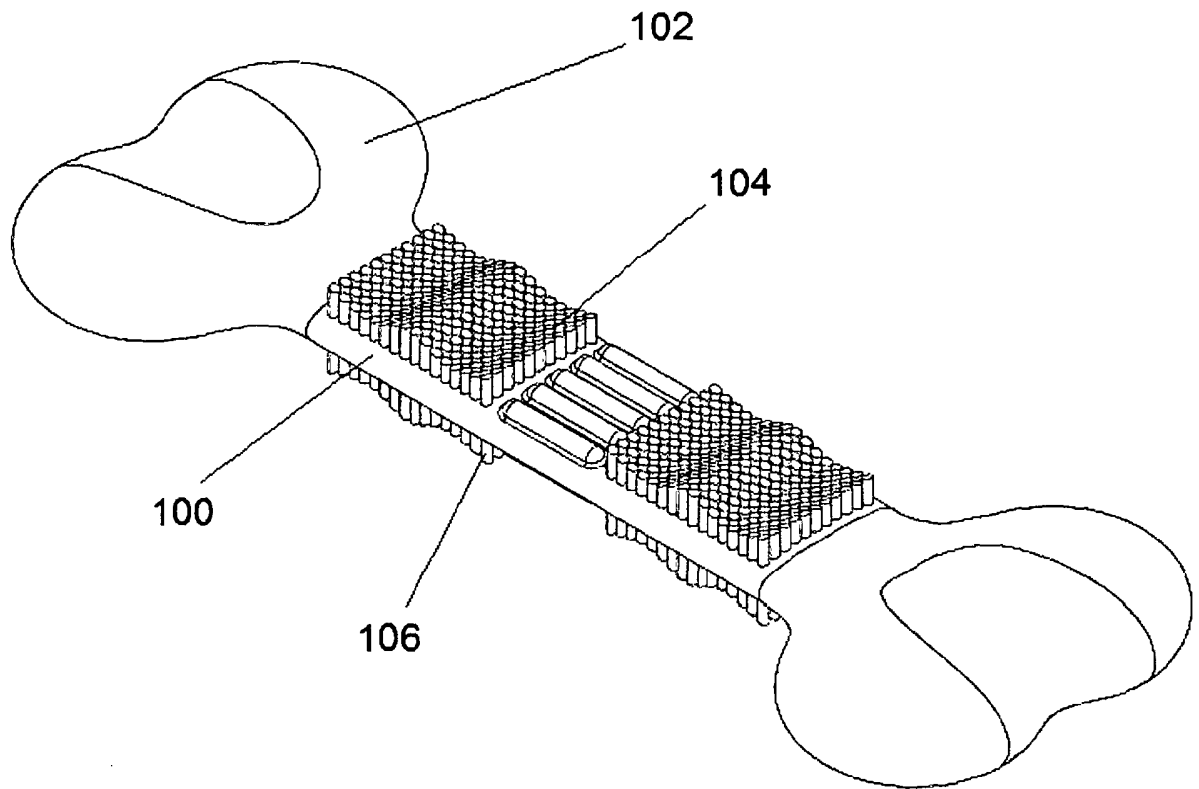
(57) An apparatus for cleaning the teeth of an animal comprises an elongated body having two ends, an upper side, and a lower side; bristles on said upper side 104, and bristles on said lower side 106, and handles 102 on said ends. The apparatus may be made from nylon. The apparatus may be actively moved around in the mouth by the owner using the handles 102.

Figure 1



GB 2476286 A

Figure 1



Patent Application of

Brian Bishop

for

Dog Tooth Brush

Background of the Invention

[1] The present invention relates to canine dental hygiene and in particular to brushes for cleaning the teeth of pet dogs.

[2] Electrical dog toothbrushes are known in the art, which usually rotate to effect cleaning. For example, WO 03077706 to Lilien discloses a powered rotational toothbrush dogs. The toothbrush includes a battery powered handle having a rotational output shaft coupled to a cylindrical brush. The handle includes a button for initiating the rotation of the brush. A method of using the toothbrush includes rotating the brush while the dog bites down onto it.

[3] Furthermore it is known in the art to use ultrasonic vibration to clean dogs' teeth. For example, JP 2007151560 to Moriyama discloses a toothbrush for cleaning the teeth, gums and oral cavities of pets utilizing an ultrasonic wave. The toothbrush comprises a bar shaped body for a pet to hold in its mouth, and an ultrasonic wave vibration generation means disposed in said body. The body comprises a first part to be held by the pet in the mouth, and a second part to be gripped by a user. The ultrasonic wave vibration generation means provided in the body of the toothbrush generates saliva cavitation in the oral cavity which, combined with liquefied toothpaste, destroys the flagella of plaque bacteria and glucan adhering to the teeth.

[4] Furthermore, dog toothbrushes are known in the art which are intended for the dog to chew. US 2007101946 to Penny discloses a combination toothbrush and chewable toy for a dog. The toothbrush is comprised of a main body, having a first end with two nubs and a second end with bristles. The first end nubs allow the toothbrush to be held between the dog's front paws, such that the brush can be held upright by the dog. The dog then chews the bristles, therefore brushing its own teeth without the assistance of a person. The main body of the present invention is made of a chew material similar to Nylabone, which additionally works the dog's gums.

Brief Summary of the Invention

[5] It can be seen from the forgoing that there is a prevalent need for methods of cleaning dogs' teeth. It would be advantageous to have a means for cleaning dogs' teeth which would be comfortable for the dog and therefore encourage the dog to co-operate with.

[6] It is therefore an object of the present invention to provide an inexpensive means for actively cleaning a dog's teeth which will encourage the dog to co-operate with the teeth cleaning process.

[7] To this end, an apparatus for cleaning the teeth of an animal is disclosed, comprising: an elongated body having two ends, an upper side, and a lower side; bristles on said upper side, and bristles on said lower side, and handles on said ends.

[8] An advantage of the present invention is that it is shaped to be comfortable for a dog to hold in the mouth, reducing the likelihood of the dog rejecting the brush or struggling when the teeth are being cleaned. A further advantage is that the dual handles provide a way for the owner to easily manipulate the

apparatus in the mouth of the dog. A yet further advantage is that the upper and lower teeth can be cleaned simultaneously.

Brief Description of the Several Views of the Drawing

[9] The invention can be better understood with reference to the following drawing, in which:

[10] Figure 1 shows the toothbrush of the present invention.

Detailed Description of the Invention

[11] In a preferred embodiment of the invention, an apparatus for cleaning the teeth of an animal is disclosed, comprising: an elongated body 100 having two ends, an upper side, and a lower side; bristles 104 on said upper side, and bristles 106 on said lower side.

[12] An advantage of having bristles disposed on both sides of the body is that the upper and lower teeth can be brushed simultaneously. Alternatively, there may be bristles on only one of the upper or lower side. Preferably the heights of the bristles follow an undulating path as shown, giving a variety of bristle heights for brushing different parts of teeth. Alternatively, the bristles may be all of the same height, or may have different height profiles as known in the art for human toothbrushes.

[13] Preferably the apparatus is shaped as shown, being substantially flat in the plane of the bed of the bristles. An advantage of this is that it is a shape which fits easily into the mouth of a dog, and allows the apparatus to be slid easily into the mouth by an owner, and actively moved around the mouth by the owner as desired, to clean the teeth. A further advantage is that the shape is comfortable for the dog, since the dog does not need to hold its mouth wide open. The dog is therefore more

likely to co-operate. Furthermore, the shape replicates that of a bone or stick, which the dog is accustomed to carrying in the mouth. Both of these factors reduce the likelihood of the dog struggling to avoid the apparatus, and facilitate teeth cleaning.

[14] The apparatus preferably further comprises handles 102 disposed at the ends of said body. The handles are preferably formed from the same piece of material as the main body, to reduce production costs, although they may be separately formed and attached by any means known in the art. Preferably, the handles are shaped to have the appearance of a bone, since this is a shape associated with dogs. Alternatively, the handles may have a conventional or ergonomic handle shape, or may comprise the shape of a logo, or any shape. Furthermore, there may be no handles. An advantage of having handles is that the user has a better grip on the brush and can manipulate it within the mouth of the dog, unlike a conventional dog chew toy which an owner has no control over once in the mouth of the dog. This enables the owner to have an active role in cleaning the dog's teeth.

[15] Preferably, the brush body and bristles are manufactured from hard Nylon, although they may be other materials known in the art. An advantage of Nylon is that it is soft enough not injure the mouth of the dog during brushing, yet it is hard enough to substantially hold its shape during such brushing, and to effectively clean the teeth.

[16] A method of cleaning the teeth of an animal is also disclosed, comprising the steps of:

[17] (1) inserting into the mouth of the animal an elongated body having two ends, bristles on at least one of an upper side and a lower side, which body preferably has handles disposed at the ends of the body;

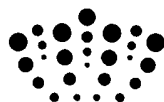
[18] (2) gripping said handles; and

[19] (3) moving said body to clean the teeth.

[20] Preferably, the apparatus is moved in at least two dimensions within the mouth of the dog, that is, forwards and backwards, and from side to side. However, the apparatus may also be moved with any motion in the dog's mouth.

Claims

1. An apparatus comprising:
 an elongated body having two ends, an upper side, and a lower side; and
 bristles on at least one of said upper and lower side.
2. The apparatus of claim 1 further comprising handles disposed at the ends of said body.
3. The apparatus of claim 1 comprising bristles on said upper side and said lower side; wherein upper and lower teeth can be cleaned simultaneously.
4. The apparatus of claim 1 comprising Nylon.
5. A method of cleaning the teeth of an animal comprising the steps of:
 inserting into the mouth of the animal an elongated body having two ends, bristles on at least one of an upper side and a lower side, and handles disposed at the ends of the body;
 gripping said handles; and
 moving said body to clean the teeth.



Application No: GB0922127.6

Examiner: Mr Stuart Purdy

Claims searched: 1-5

Date of search: 8 October 2010

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1-5	US 6116191 A (SUCHOWSKI) See whole document and note in particular handle 210 and bristles 300;
X	1-5	US 5033410 A (SIGURDSSON) See whole document and note in particular bristles formed as a result of chewing and knots being commonly used as handles;
X	1-5	US 6739287 B1 (SARANTIS) See whole document and note in particular handle structures 62 and 64 and upward and downward facing bristles 68;
X	1, 3, 4	GB 2457665 A (DOYLE) See whole document and note in particular upward and downward facing bristles;
X	1, 3, 4	JP 2007160073 A (PIGEON) See WPI abstract and figures;
X	1, 4	US 2007/101946 A1 (PENNY) See whole document and note in particular bristles on top surface 70;
A	-	US 2006/102099 A1 (EDWARDS)

Categories:

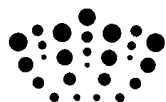
X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X :

Worldwide search of patent documents classified in the following areas of the IPC

A01K; A46B



The following online and other databases have been used in the preparation of this search report

WPI & EPODOC

International Classification:

Subclass	Subgroup	Valid From
A01K	0015/02	01/01/2006
A46B	0009/04	01/01/2006