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(54) Title: ECO-FRIENDLY LAMP MADE UP OF COMPOSITION BASED ON PANCHAGAVYA WITH THE COMBINATION OF LEAVES USED IN TRADITIONAL HERBAL MEDICINE.

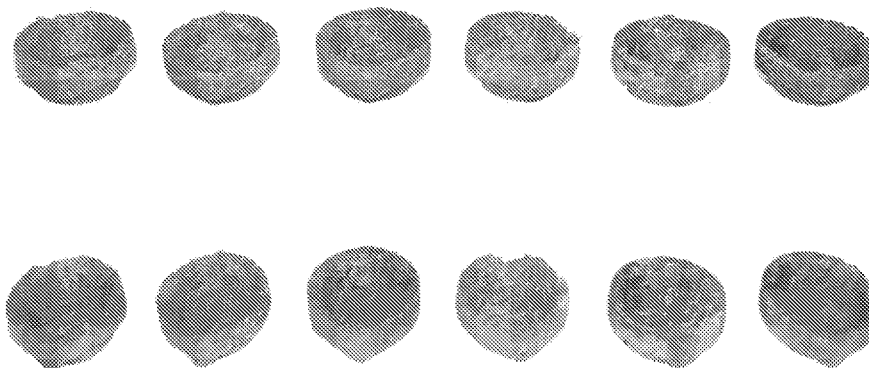


Figure 7

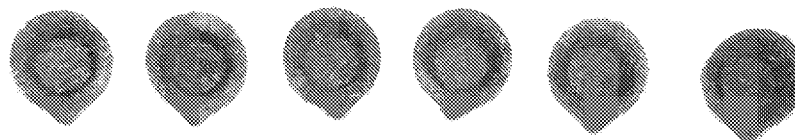


Figure 8

(57) Abstract: The present invention relates to lamp made using a novel composition based on Panchagavya with the combination of leaves used in traditional herbal medicine for making lamp suitable for lighting at temples, homes. The present invention more particularly relates a lamp which gets burnt completely and leaves behind useful ash/residue/bhasma which can be used in a number of useful applications.



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**ECO-FRIENDLY LAMP MADE UP OF COMPOSITION BASED ON  
PANCHAGAVYA WITH THE COMBINATION OF LEAVES USED IN  
TRADITIONAL HERBAL MEDICINE.**

5 **FIELD OF THE INVENTION**

The present invention relates to a lamp made using a novel composition based on Panchagavya with the combination of leaves used in traditional herbal medicine for making lamp suitable for lighting at temples, homes. The present invention more particularly relates a lamp which gets burnt completely and leaves behind useful ash/residue/bhasma which can be used in a number of useful applications.

**BACKGROUND OF THE INVENTION**

15 Panchagavya or Panchakavyam is a concoction prepared by mixing five products of cow and used in traditional Indian rituals. The three direct constituents are cow dung, urine, and milk; the two derived products are curd and ghee. These are mixed in proper ratio and then allowed to ferment. Panchagavya is a term used in Ayurveda to describe five major substances obtained from cow, which include cow's urine, cow's milk, cow's ghee, cow's curd and cow's dung.

**U.S. Patent No.6410059** discloses a pharmaceutical composition comprising an antibiotic and cow urine distillate in an amount effective to enhance antimicrobial effect of the antibiotic; the antibiotic can be an antifungal agent. The antibiotic can be a quinolone or a uoroquinolone. The antifungal agent can be azoles, clotrimazole, mystatin or amphotericin).

**U.S. Patent No 6896907** (the cited invention relates to a novel pharmaceutical composition comprising an effective amount of bio-active fraction from cow urine distillate as a bioavailability facilitator and pharmaceutically acceptable additives selected from anticancer compounds, antibiotics, drugs, therapeutic and nutraceutic agents, ions and similar molecules which are targeted to the living systems. for its medicinal

properties, particularly for its use along with antibiotics for the control of bacterial infection and fight against cancers).

In the prior art, lamps used for worshipping generally known as "Diyas" are majorly earthen diyas, metal diyas. These diyas use oil, wax and ghee as a source for burning the wicks. The wicks are mostly made of cotton. The diyas after burning if reused by washing will waste lots of water in the cleaning process. Indian Patent application 201621028924 discloses eco-friendly camphor diya which are made from the composition of chemicals used for water purification and contain Alum (Potassium alum), Sodium Chloride and few other chemicals known for its properties to purify water.

Lamp made up of cow dung, cow ghee and essential oil is a known in the literature (<https://aajtak.intoday.in/story/diwali-eco-friendly-diya-made-of-cow-dung-mosquitos-l-957938.html>). Lamp Pot made up of cow dung is also a part of the literature (<http://www.krishnaleelagroup.com/gir-cow-gold-mine/>)

The said prior literature does not teach lamp made using all five products of cow known as Panchagavya and herbal leaves which are associated with both spiritual auspiciousness as well as physical well-being/health.

#### **Problems identified:**

Lamps made out of metals such as bronze, brass, silver are lit in temples and homes during festivals as a part of celebrations/rituals and they all need frequent cleaning and lots of water is wasted during the cleaning process and the surfactant based synthetic chemicals used for cleaning cause environmental pollution.

#### **Solution provided by the present invention**

To avoid water wastage, and to prevent environmental pollution and to enhance air purification, the present inventors have invented a lamp made up of natural ingredients for one time use only as this lamp gets burnt slowly and completely when the oil/fat gets burnt. Single use lamp of the present invention and its leftover ash/ residue/bhasma in any form whether reused or not, remains planet/ eco-friendly without carbon emission

footprint while in use and thereafter. Ritual of lamp lighting during worship/festivals results in environmental pollution. However, this panchagavya and herbal leaves containing lamp invention will lead to a positive behavioural change in people and thus prevent and completely nullify/neutralize environmental pollution.

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The present inventors have developed lamps made up of using a composition based on Panchagavya with the combination of leaves used in traditional herbal medicine for making lamp suitable for lighting at temples, homes which are not disclosed in the literature. Panchagavya and herbal based lamp made for the first time which is the subject matter of the present invention. The leaves impart natural aroma to the lamp. The leaves may impart mosquito repellent properties to the lamp.

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#### **Advantages of the present invention**

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1. Water consumption will reduce .
2. Efforts to clean will be reduced.
3. Synthetic surfactants and chemicals based dish washers will not be needed for cleaning lamps and thereby reducing the environmental pollution.
4. Reuse of ash: the lamp bums along with the cotton wick when lit using ghee or oil and leaves behind ash/ residue/ bhasma; the ash/residue bhasma can be reused to smear on our forehead, as a dish washer, as a mosquito repellent, as bio fertilizer for improving the growth factors in the soil for growing plants.

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#### **OBJECTS OF THE INVENTION**

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It is an object of the present invention to provide a lamp made up of natural ingredients for one time use.

It is another object of the present invention to provide a lamp made up of using a composition based on Panchagavya with the combination of leaves used in traditional herbal medicine for making lamp suitable for lighting at temples, homes.

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### **SUMMARY OF THE INVENTION**

According to an aspect of the present invention, there is provided a lamp made up of natural ingredients for one time use only comprising:

- 5        i) 40-60% Cow dung;  
          ii) 5-20% Cow urine;  
          iii) 2-8% Cow ghee;  
          iv) 2-8% Cow butter;  
          v) 1-5% Cow milk;  
10       vi) 1-10% Cow curd;  
          vii) 10-25% Mixture of leaves selected from 5% to 15% from the Neem tree  
              (Azadirachta Indica), 5% to 10% from the lemon tree (Citrus Limon) and 5% to  
              15% from the Peepal tree (Ficus religiosa).

### **DESCRIPTION OF FIGURES:**

**Figure 1:** Front view of the mould (Cavity) use to make the lamp of the present invention.

**Figure 2:** Top view of the mould (Core) use to make the lamp of the present invention.

20 **Figure 3:** Individual parts of the moulds.

**Figure 4:** Lamp Component

**Figure 5:** Ejector pin

**Figure 6:** Graphical representation of the mould.

**Figure 7:** Photographs of the Front view of the lamp of the present invention.

25 **Figure 8:** Photographs of the Top view of the lamp of the present invention.

**Figure 9:** Photographs of the mould used to prepare the lamp of the present invention.

### **DETAILED DESCRIPTION OF THE INVENTION**

30 The present invention relates lamp made up of natural ingredients for one time use as this lamp gets burnt slowly and completely when the oil/fat gets burnt.

An embodiment of the present invention relates to lamp made using a novel composition based on Panchagavya with the combination of leaves used in traditional herbal medicine

for making lamp suitable for lighting at temples, homes. The lamp of the present invention gets burnt completely and leaves behind useful ash/residue/bhasma which can be used in a number of useful applications such as reused to smear on our forehead, as a dishwasher, as a mosquito repellent, as bio fertilizer for improving the growth factors in the soil for growing plants.

In another embodiment, the composition of the lamp contains primarily cow dung, cow urine, cow ghee and cow butter, leaves of the neem tree (*Azadirachta Indica*), lemon tree (*Citrus limon*) and peepal tree (*Ficus religiosa*).

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**The percentage (%) Formula Composition of the Lamp is as follows:**

| Sr. No. | Material  | Percentage |
|---------|---|------------|
| 1       | Cow dung  | 40-60      |
| 2       | Cow urine   | 5-20       |
| 3       | Cow ghee  | 2-8        |
| 4       | Cow butter  | 2-8        |
| 5       | Cow milk  | 1-5        |
| 6       | Cow curd  | 1-10       |
| 7       | Mixture of leaves (neem tree, lemon tree and peepal tree) | 10-25      |

15 In another embodiment, there is provided a process to manufacture the lamp of the present invention the manufacturing process comprising the steps of:

- i) The wet cow dung is mixed well with cow urine, cow ghee, cow butter, cow milk and cow curd which will be henceforth called as mixture- 1 in the description;
- 20 ii) The fresh leaves are ground to make a wet paste which will be henceforth called as mixture-2 in the description.
- iii) Adding mixture-2 to mixture- 1 to get the final mixture-3 and this is allowed to soak for at least 30 min. The mixture-3 is poured into a mould shown in Figure 1 to 6 and Figure 9 to prepare a lamp as shown in Figure 7 and 8 by applying pressure and temperature. For the manual process of lamp making, the pressure applied is around 900 - 1100 psi and max temperature is 100°C. Alternately,

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automatic machine based on single horse power with pneumatic control of air pressure of 1900-2100 psi and power heater can be used for making lamps.

The present invention is illustrated with reference to the following Example and is not intended to limit the scope of the invention. Any permutations and modifications in the present invention are possible keeping in mind the scope of the invention.

**Example 1:**

**The percentage (%) Formula Composition of the Lamp:**

| Sr. No. | Material  | Percentage |
|---------|---|------------|
| 1       | Cow dung  | 50         |
| 2       | Cow urine   | 10         |
| 3       | Cow ghee  | 5          |
| 4       | Cow butter  | 5          |
| 5       | Cow milk  | 2          |
| 6       | Cow curd  | 8          |
| 7       | Mixture of leaves (neem tree, lemon tree and peepal tree) | 20         |

**Process for moulding the lamp from the formulation**

The wet cow dung (50%) is mixed well with cow urine (10%), cow ghee (5%), cow butter (5%), cow milk (2%) and cow curd (8%) to obtain a mixture-1. The fresh leaves (20% mixture of neem leaves, lemon leaves and peepal leaves) are ground to make a wet paste (mixture 2) which is added in the said mixture-1 to obtain a final composition (mixture 3) and this is allowed to soak for at least 30 min.

The formulated mixture-3 is poured into a mould as shown in Figure 1 to 6 and Figure 9. After compressing the formulated mixture in the mould by applying pressure in the range from 900 - 1100 psi for manual operation and 1900-2100 psi in case of automation, the same is heated at a temperature in the range from 80-100°C to prepare a lamp as shown in Figure 7 and 8.



CLAIMS

1. A lamp made up of natural ingredients for one time use only comprising:
  - i) 40-60% Cow dung;
  - 5 ii) 5-20% Cow urine;
  - iii) 2-8% Cow ghee;
  - iv) 2-8% Cow butter;
  - v) 1-5% Cow milk
  - vi) 1-10% Cow curd
  - 10 vii) 10-25% Mixture of leaves selected from 5% to 15% from the Neem tree (Azadirachta Indica), 5% to 10% from the lemon tree (Citrus Limon) and 5% to 15% from the Peepal tree (Ficus religiosa).
  
2. A process for the preparation of lamp as claimed in claim 1 comprising the steps of:
  - 15 i) Mixing wet cow dung with cow urine, cow ghee, cow butter, cow milk and cow curd to obtain a mixture;
  - ii) Grounding of leaves of neem tree (Azadirachta Indica), lemon tree (citrus limon) and peepal tree (Ficus religiosa) to obtain a wet paste;
  - 20 iii) Adding wet paste obtained in step (ii) to the mixture obtained in step (i) to obtain a composition which is poured into a mould to obtain a lamp by applying pressure in the range from 900 - 1100 psi and temperature in the range from 80-100°C.
  
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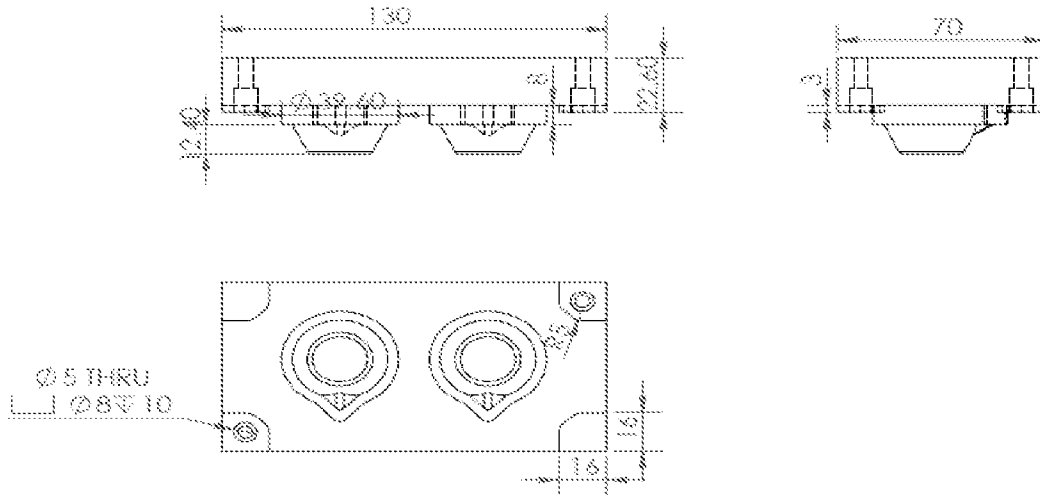


Figure 1

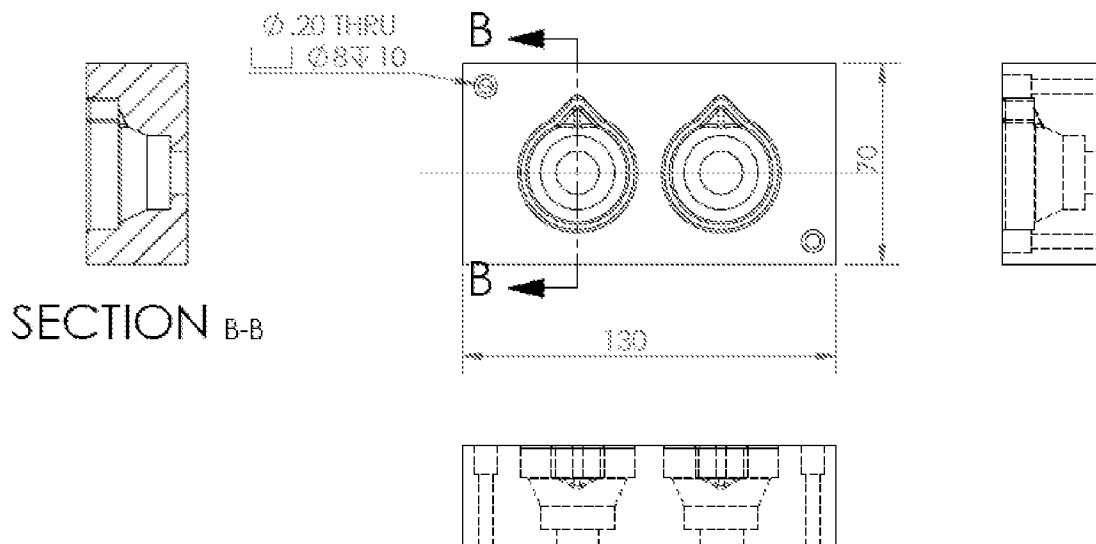
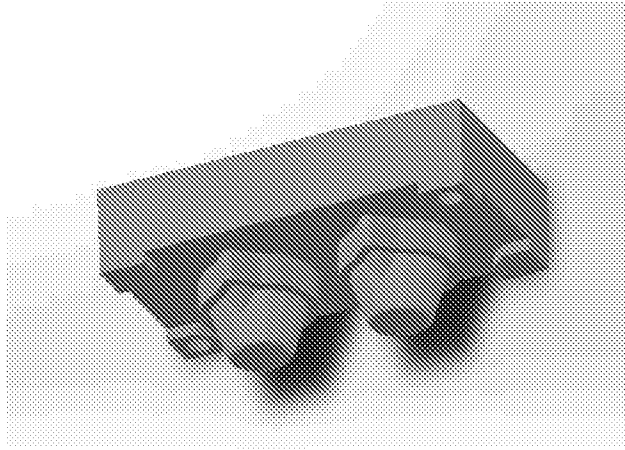
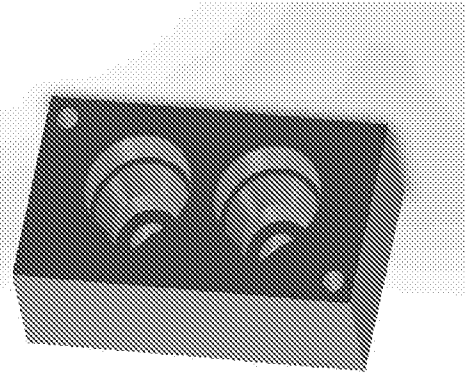


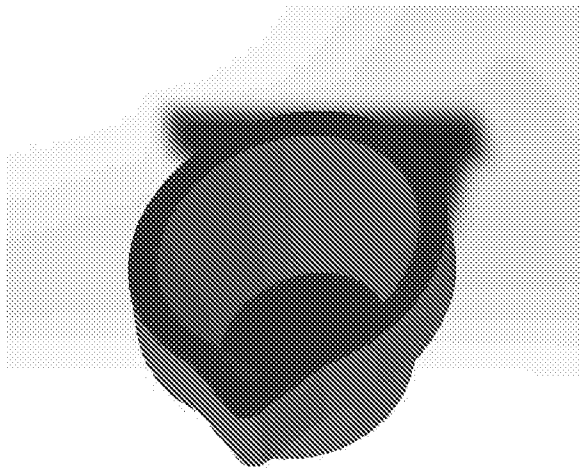
Figure 2



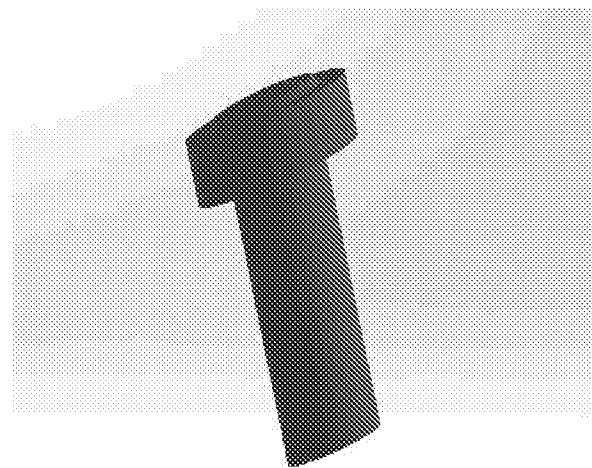
**CORE PLATE**



**CAVITY PLATE**



**LAMP COMPONENT**



**EJECTOR PIN**

**Figure 3**

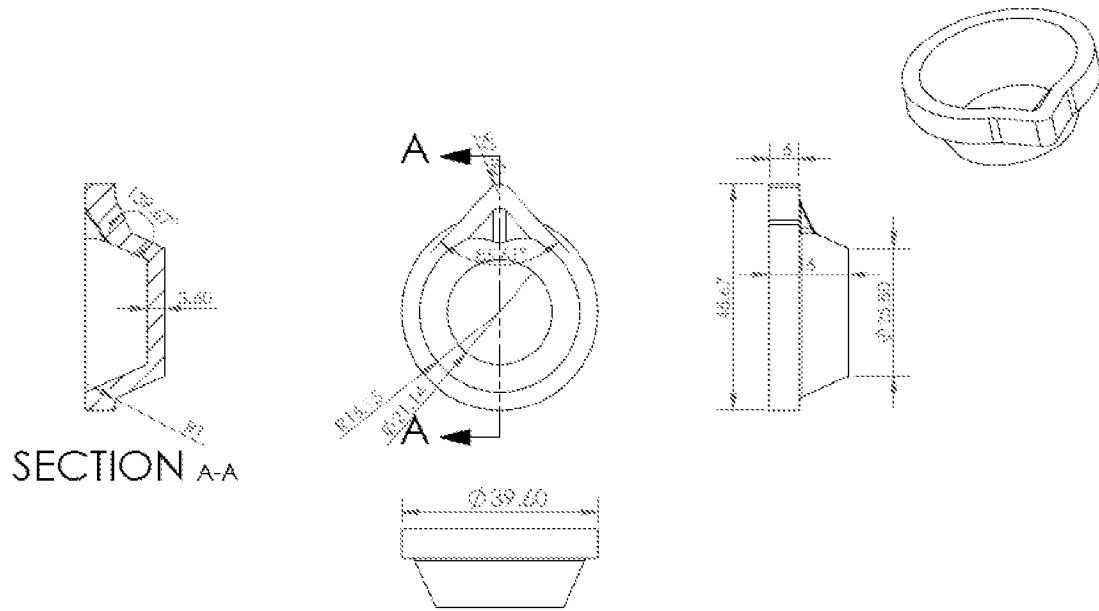


Figure 4

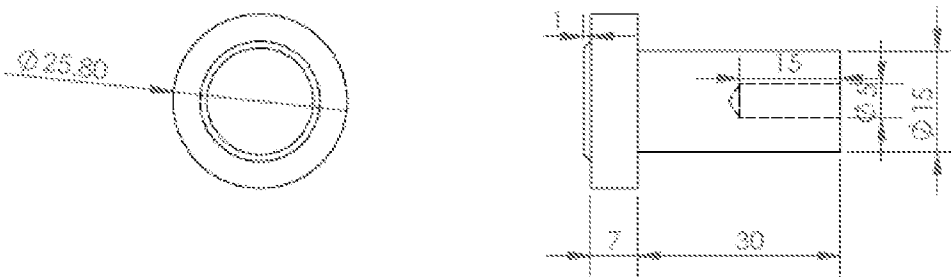


Figure 5

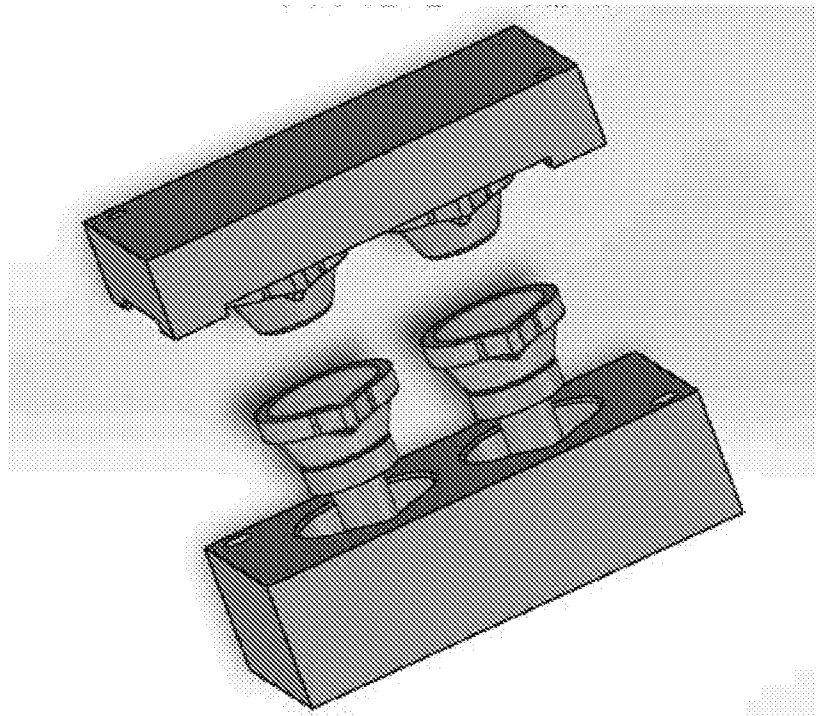


Figure 6

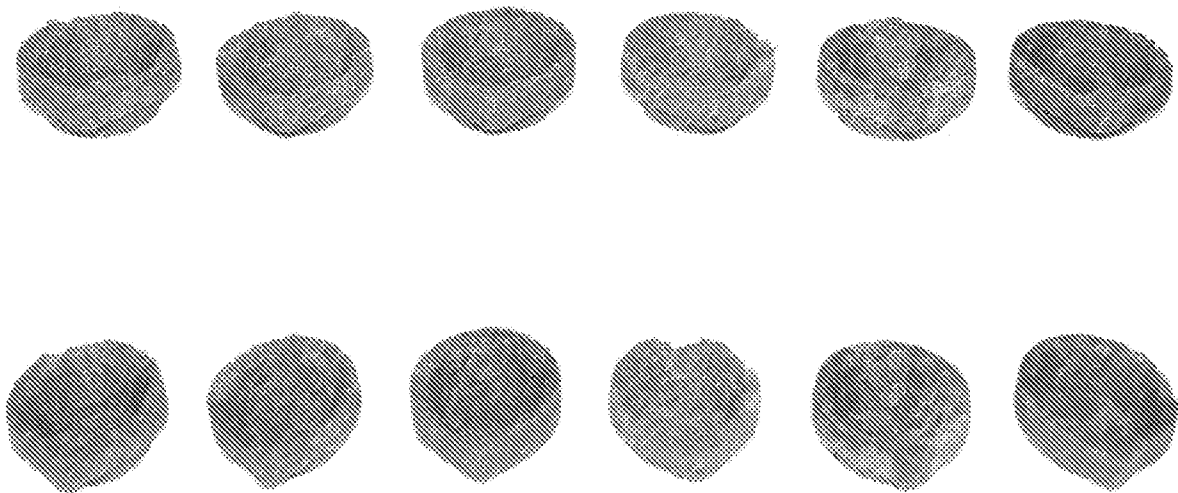


Figure 7

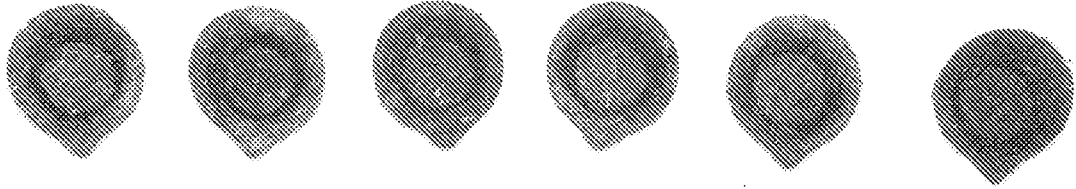


Figure 8

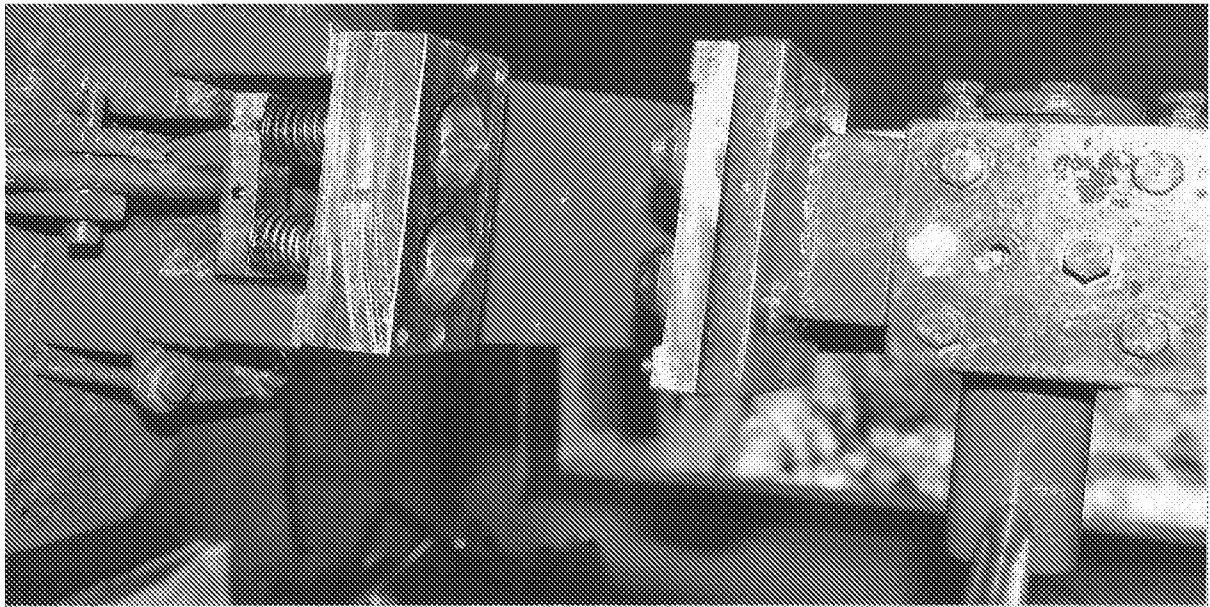


Figure 9

## INTERNATIONAL SEARCH REPORT

 International application No  
 PCT/IB2018/059663

## A. CLASSIFICATION OF SUBJECT MATTER

 INV. A01P17/00 A01N25/08 A01N65/26 A01N65/36 A01N65/08  
 ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

 Minimum documentation searched (classification system followed by classification symbols)  
 A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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 Further documents are listed in the continuation of Box C.

 See patent family annex.

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Date of the actual completion of the international search

1 February 2019

Date of mailing of the international search report

21/02/2019

Name and mailing address of the ISA/

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Authorized officer

Davies, Maxwell

## INTERNATIONAL SEARCH REPORT

International application No  
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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