

**The Patents Act, 1970**  
**Qualifying Examination under section 126 of the Patents Act**  
**(As amended & updated)**  
**PAPER-II**  
**Drafting and Interpretation of Patent specification and other Documents**  
**November, 2007**

**Time :- 2 ½ Hrs.**

**Total Marks –100**

**Total Pages - 7**

- Instructions :**
- 1. All questions are compulsory.**
  - 2. Marks of each question are indicated at the end of the question**
  - 3. Answers should be precise and to the point supported by relevant provisions of the Act and Rules.**

**Q.No.1.** Answer any five of the following :-

a) Your client ABC Pharma, Chennai approaches you with a known molecule having slight modification therein by adding a methyl group in the benzene ring. They wish to obtain a Patent for this invention. Advise appropriately to your client about the available provisions in the Indian Patent Act.

b) Your client has filed an application for patent. They received first examination report from the Controller of Patents with the objection that “your said application contains the claims from 8 to 15 distinct from rest of the claims not falling under the single inventive concept”. Advise your client suitably about the provisions in the Patent Act in this regard.

c) Your client Nokia Corporation, USA wishes to file an application for Patent in India based on the application filed in USA dated 01.01.2007. The invention of US application has been published in a journal on 01.10.2007 in India and US. Explain to your client the relevant provisions to protect the invention in India appropriately.

d) Your client isolated a new DNA sequence from the cells of a plant of Apple. The said DNA sequence on modification *in vivo* developed resistance to a disease. The client wishes to protect following :

- (i) A modified DNA sequence of the plant
- (ii) A method for isolation of DNA sequence
- (iii) A DNA sequence in the cells of the plant
- (iv) A method of modifying DNA sequence *in vivo*
- (v) A method of treatment of plant by modification of the DNA sequence *in vivo* as claimed in claim 1.

Advise appropriately to your client about the relevant provisions for the protection of above kind of invention.

e) Your client LG Chemicals Pvt. Ltd., Korea wishes to enter into the National Phase of India for obtaining Patent as early as possible based on his international application (without claiming any priority of earlier filing) filed in Korea. With this intention he approached you at 12th month from the date of international application filing with the prior art search report and preliminary examination report from the International Search Authority.

Advise your client the available provisions in the Indian Patents Act and rules to proceed with such National Phase application in the circumstances as mentioned above.

f) The Pfizer Pharma Ltd, USA obtained a patent on a pharmaceutical product

from the Indian Patent office. Your client Zindal Pharma Pvt. Ltd., came to know about the said patent on receipt of a notice of infringement from the Pfizer Pharma Ltd., USA. The Zindal Pharma Pvt. Ltd. approached you for remedial action. They informed you that they are already manufacturing the same product and are exporting to Zambia. They have taken appropriate license to export the Drug from the authorities.

Advise your client the course of action which may be adopted to benefit your client.

(10 x 5 = 50)

**Q.No.2** Your client Maruti Pvt. Ltd., Gurgaon sent a request for examination through speed post in respect of an application filed by them. The said document was delivered in Patent office by Post office two days after the last date for the filing of the request for the examination. Patent office sent a communication to Maruti Pvt. Ltd., Gurgaon stating that the request for examination has been filed after the due date and therefore cannot be taken on record.

Your client approaches you to take remedial action. Draft appropriate documents to justify the stand in favour of your client.

**OR**

Draft an application in favour of your client XYZ Pharmaceutical Ltd., 23, Industrial Estate, Hyderabad 500049 for obtaining compulsory license for export of patented anticancer pharmaceutical product "sunitinib" u/s 92(A) of the Patent Act, 1970 to "Angola". The facts of the Patent is as under :

Patentee	Royal Pharma, Roland Industrial Zone, UK
Patent No.	205774
Documents and evidence in support of obtaining compulsory license u/s 92 (A)	(i) Drug license issued by Angola Govt. in favour of XYZ Pharmaceutical Ltd., Hyderabad for supply of 20000 tablet per month (ii) Letter from Angola Govt. authorizing XYZ Pharmaceutical Ltd., Hyderabad for export of its Drug to Angola for the purpose of export to Angola
Terms and conditions acceptable to XYZ Pharmaceutical Ltd., Hyderabad with regard to Royalty on issuance of the Compulsory License under section 92(A) for export	The Royalty of the three percents (3%) on net ex-factory price is payable to the Patentee

(20 x 1 = 20)

**Q.No.3 Draft Complete specification including claims for filing patent application on the basis of the information given by the applicant :**

**Applicant's Name:** Sanjeevani Herbals Pvt. Ltd, Industrial Estate, Okhla, New Delhi

**Disclosure of the Invention:**

We have developed a herbal formulation for treating AIDS and also have developed a process for preparing the same. The herbal formulation consists of Tulasi seeds, Momordica charantia seeds, Silaja, Silajit, Karanajaka, Chanaka, Kaphyog, Cinnamomum zeylanicum bark, Curcuma zedoaria root, Allilum sativum bulb and Betula alba bark. The herbs are used in amounts effective to produce a physiological benefit in combination with an amount of sodium chloride, more preferably sea salt, which is effective to promote the digestibility (palatability) and storage stability of the therapeutic composition.

Presently there is no specific and proven herbal medicine available for the treatment of AIDS. Currently the patients with AIDS are being treated using synthetic drugs, which are not only expensive but also have negative side effects like nausea, weight loss, cardiac irregularities and other related secondary effects.

This herbal formulation is based on plants, which are easily available in India, and so the treatment is cheaper. The composition of herbs described herein functions to augment the immune system through the synergistic interaction of the herbal components. The herbs are used in amounts effective to produce a physiological benefit in combination with an amount of sodium chloride, more preferably sea salt, which is effective to promote the digestibility (palatability) and storage stability of the therapeutic composition. The formulation is therapeutically effective and shows good clinical efficacy and at the same time shows a drastic reduction of side effects. The formulation can be formulated in tablets, tonic and has good taste.

The term "sea salt" is used to describe preferred salt which is used in the present invention to promote the digestibility and storage stability of compositions according to the present invention. Although any source of sodium chloride may be used in the present invention, provided that the amount of sodium chloride represents approximately 1% to about 20% by weight, more preferably about 3% to about 5% by weight of the final composition.

The above herbs are typically dried and ground to a fine powder. All ingredients are washed. Ripened seeds of Tulasi and Momordica charantia are selected. All ingredients are pulverized to fine powder and then mixed with sodium chloride. The antioxidant such as Vitamin C & Vitamin E is used as gum and stabilizers and other known ingredients such as flavors may be used upto 2%.

All weights are expressed in milligrams and all percentages are by weight of the essential elements in the composition. The composition is typically an intimate mixture of powders. However, extracted herbs may also be used. The composition is then combined with effective amounts of sodium chloride, more preferably sea salt, in amounts effective to substantially enhance the digestibility and the storage stability of the composition. This amount generally ranges from about 1% to about 20% by weight of the composition, more preferably about 3% to about 5% by weight of the composition. 3% by weight of salt is most preferably included in the present compositions. The herbal mixture comprises from about 1.5% to about 75% Tulasi seeds, from about 1.5% to about 75% Momordica charantia seeds; from about 0.7% to about 35% Silaja bark; from about 0.6% to about 30% Silajit root; from about 0.6% to about 30% Karanjaka fruit; from about 0.6% to about 30% Chanaka, from about 1.5% to about 75% Kaphyog root, from about 1.5% to about 35% Cinnamomum zeylanicum bark,; from about 0.4% to about 25% Curcuma zedoaria root bark from about 0.4% to about 25% Allilum sativum bulb; and from about 0.4% to about 25% Betula alba bark.

The antioxidant such as Vitamin C & Vitamin E is used as gum and stabilizers and other known ingredients such as flavors may be used upto 2%.

Draft a complete specification for the protection of process and product in a single application.

*or*

**Applicant's Name:** M/S Thomson and Thomson Co. .Pvt .Ltd, 198, E Block, Sector-23, Gurgaon, Haryana, India

**Disclosure of the Invention:**

This invention aims to provide a toothbrush which can effectively remove by brushing plaque on surfaces such as between teeth or between teeth and gums where plaque is easy to accumulate and at the same time massage gums.

Toothbrushing has become an established custom for public people in everyday lives in recent years. The toothbrushing aims to prevent dental caries, periodontitis and foul breath and to massage gums, and which is widely done using toothbrush. The toothbrushes are used to remove plaque adhered to teeth as well as food residue between teeth and to massage gums as well. For conventional toothbrush filament, mainly monofilament made of uniform resin with round sectional shape has been used. Concerning tip shape of such monofilaments, hemispherical or tapering shape is known. Further toothbrushes are known which uses filaments with only one

tip shape or two or more tip shapes for individual tuft and they are embedded in tuft holes on the block head.

As public interest in oral care grows strong in recent years, to remove effectively plaque which will cause carious teeth or periodontitis, a number of toothbrushes have been developed as shown above. However in the case of toothbrushes whose bristles have all needlelike tapering tips to remove plaque adhered to the surface between teeth and gums, because the bristles near tips becomes too thin and too flexible, the bristle tips lose their stiffness necessary to remove plaque sufficiently, and the purpose of toothbrushes to prevent periodontitis cannot be attained after all.

On the other hand, toothbrushes whose bristle ends being round or hemispherical are suitable to clean flat surfaces of teeth or to massage gums, however it is difficult for such toothbrushes to remove plaque between teeth or in boundary spaces between teeth and gums because the bristle tips are too thick to enter such boundary spaces to remove plaque therein. That is, it is difficult for conventional toothbrushes having bristles with same tip shape or those with different tip shapes being uniformly mixed to clean up in every nook and corner in the mouth. The preferred embodiment of the present invention essentially comprises a toothbrush effective regardless of toothbrushing method or technique to prevent carious teeth or periodontitis which can more easily and effectively clean up in every nook and corner in the mouth than conventional ones, that is, the toothbrush can remove plaque and food residue adhered to surfaces between teeth, between teeth and gums and occlusal surface and give a proper stimulus to gums by massaging to quicken the circulation of the blood.

The toothbrush head comprises tufts 4, 5 of bristles of polygonal cross-section, and tufts 6 of bristles of sheath-core construction which shows in cross-section as concentric circles. The polygonal bristles enable the cleaning of flat tooth surfaces and gum massage. The sheath-core bristles have a hard core for penetration between teeth and a softer sheath reducing bending. The cross-sections, lengths, profiles, tip shapes and materials of the bristles are extensively described.

In the drawings, FIGURE 1 (a) illustrates a plan view of a block head of a toothbrush in accordance with the present invention and FIGURE 1(b) a side view thereof.

FIGURE 2 illustrates a front view of on rush portion and a block head of a toothbrush in accordance with the present invention.

Figure 3(a) illustrates a plan view of a toothbrush in accordance with the present invention, and Figure 3(b) a side view thereof.

Figure 4(a) to (d), each illustrates a portion of sectional view showing condition polygonal filaments being densely embedded, that is, Figure 4(a) shows a triangular filament, (b) a tetragonal filament, (c) a hexagonal filament and (d) a octagonal filament, and Figure 4(e) illustrates the condition of conventional filaments having round cross section.

In the Figures, the following reference symbols are used: 1- block head, 2-handle, 3-block head surface, 4 and 5 tufts of polygonal filaments, 6-tuft composed of sheath-core structural filament, 7- brush end,  $\alpha$ - an angle of the first cut surface to the block head surface,  $\beta$ - angle of the third cut surface to the block head surface.

Draft a complete specification from your client including statement of claims.

**(30 x 1 = 30)**

Figure 1

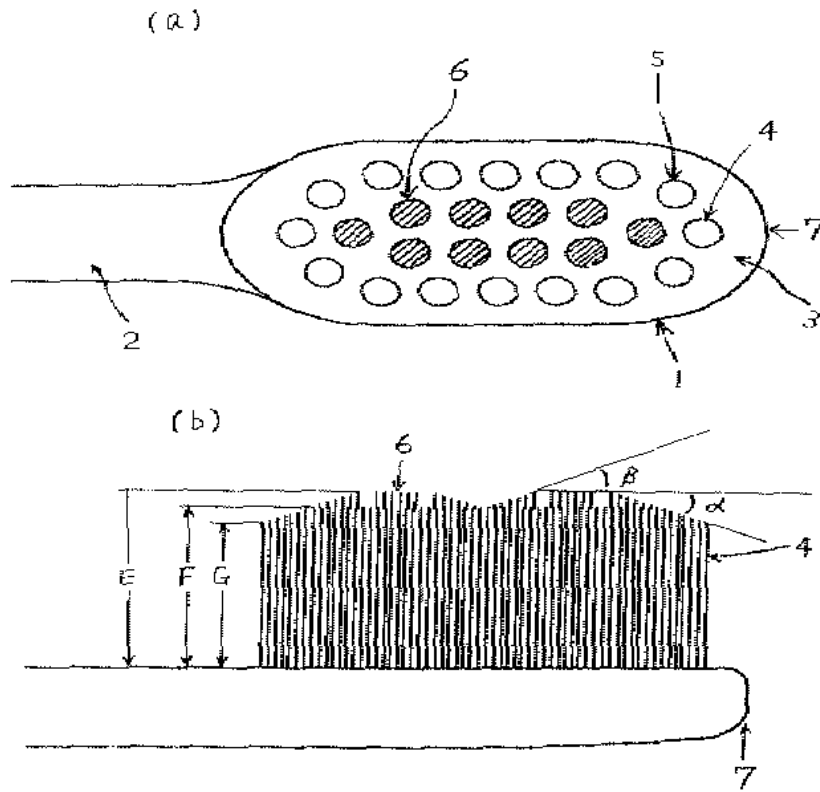
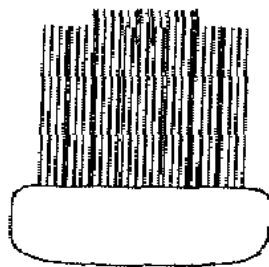


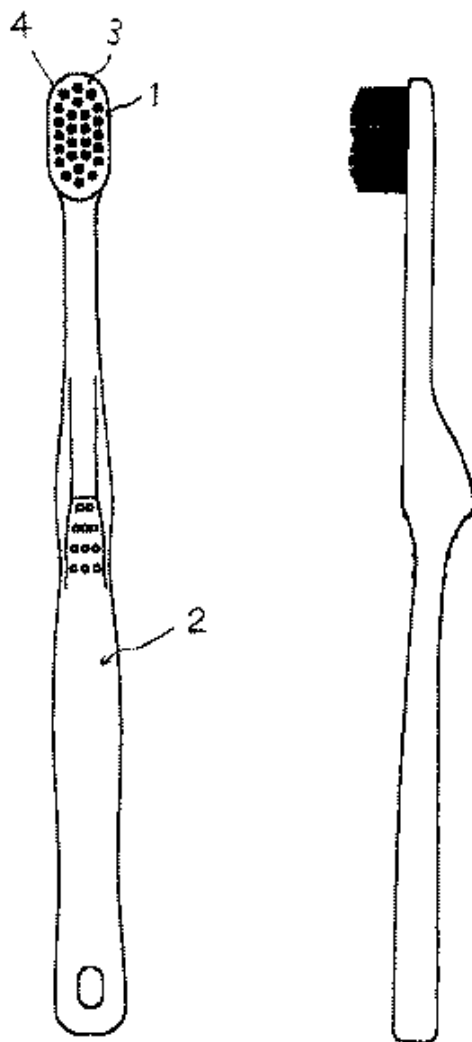
Figure 2



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Figure 3

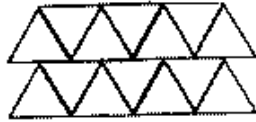


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Figure 4

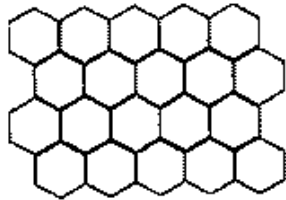
(a)



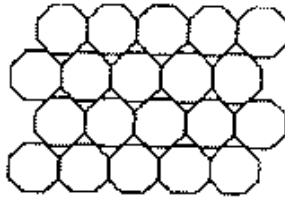
(b)



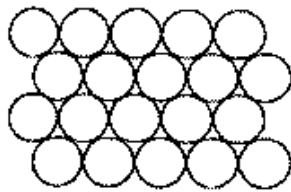
(c)



(d)



(e)



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