

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
April, 2007

Time:-2 ½ Hrs.

Total pages - 5

Total Marks - 100

Instruction:

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 3D GRAPHICS invented a new software code and an engine for the code. The code can be either implemented on existing engines to improve its efficiency or can be implemented on the new engine devised by them. They wish to get it patented in India as quickly as possible. Advise him the necessary details and procedures involved to obtain patent in the minimum possible time.
- b) Your client Mr. WISE has got a patent in India for a method of manufacturing a product X. The patent is in force from 10-01-2004. Your client has improved upon the patented method and seeks your advice for protecting the improvement. Suggest him the best and economic way for its protection. Also inform him the necessary fees to be paid for the grant of patent and the maintenance fees for the entire term of patent.
- c) An Indian Research student invents a new form of drug for small pox. He claims that this drug is 30% more efficient than all other available drugs. He wishes to get it patented only in the USA. Advise him the necessary procedures to be carried out with Indian Patent Office.
- d) A Patent is granted to M/s. Greedi Ltd. for manufacture of a product X in the year 2003. The patentee in order to extract maximum benefit inflates the price and supplies the product in the market in a limited quantity. Being disturbed by this unjust exploitation of the patent, your client M/s. Right Ltd. who is interested to make and market that product approaches you. What provisions of the Patents Act would you suggest to them under which they can get a licence? Advise your client the necessary procedures to be carried out with the Patent Office.
- e) An Indian automobile firm is doing research on a novel brake system, which could be completed in another ten months. They approach you to get a patent in India, Europe and China. Explain him the possible ways of getting a patent, the necessary documents needed, various fees involved, time period required and various other requirements.

f) Three students approach you for getting a patent on their novel machine and all three are the applicants and inventors of the machine. Explain to them the rights of the co-owners on the patent.

(5 x 10 = 50)

Q.No.2.

Your client Biopharma, Mysore, India, patentee of patent No.202625 dated 10-10-2005 wishes to change their name to Biosafe Pharmaceuticals. Further, they want to grant a licence to another company Altius Pharmaceuticals Ltd. on non-exclusive basis with a royalty of 3% on the net ex-factory price. Draft the necessary letters and agreements for your client.

OR

M/s. Alpha Pharma received patent rights in India for a novel compound B claiming priority from 1st January 2002. Patent Grant notification was made in the Official Journal on 1st July 2006.

M/s. Beta Pharma, your client, on seeing the notification, is of the opinion that the compound B was imported to India on July 2001 and being commercially sold at all places from August 2001.

M/s. Beta Pharma approaches you on 1st March, 2007 for necessary advice and suitable actions to be taken.

Help them suitably.

(1 x 20 = 20)

Q.No.3. Draft Complete Specification including claims for filing patent application on the basis of the information given by your client:

Your client M/s. Apco Construction, Salem, India furnishes the following information:

We have invented wall ties having an elongate shank fabricated from hard drawn stainless steel for tying together the two leaves of a cavity wall, for example two brick leaves.

Conventional wall tie is formed from wire and has a simple shank with one or two shallow U-shaped bends known as lips which help in collecting condensed water and promoting formation of drops which when of sufficient size, fall down to the bottom of the cavity. Such lips create a complication in to brick laying as it is essential that they be incorporated in the correct orientation, that is bend downwards, if they are to function properly with respect to drip formation.

Preferred embodiment of the invention is described with illustration as follows: -

Fig. 1 is a plan of a wall tie according to the invention.

Fig. 2 is a side elevation of tie of Fig. 1.

Fig.3 is an end elevation of the tie of Figs.1 & 2.

10 - wall tie

12 - elongate shank

14, 16 - triangular heads

18, 20 - crimped portion of heads.

- 22 - double lips
- 24, 26 - adjacent bends
- 28 - straight portion making an angle of 40° to axis of shank.

According to the preferred embodiment of the present invention there is provided a wall tie (10) having an elongate shank (12). At each end triangular heads (14, 16) are provided for embedding in a mortar course. The shank (12) is also provided with one or more pairs of adjacent bends (24, 26) extending in opposite directions in a plane normal to that of said head. Such a tie is reversible and will promote drip-formation equally well in either orientation. The adjacent bends (24, 26) thus have a generally S-shaped configuration, the intermediate portion between the two U-bends constituting the S preferably being straight and forming an angle of less than 45° to the axis of the shank (12).

Preferably the wall tie is made from a single length of hard drawn stainless steel wire with at least one triangular head (14,16). To enhance the anchorage of the head when embedded in mortar, the wire forming the head or heads may be crimped at one or more places.

Drawings enclosed.

OR

Your client M/s. Ranepal Ltd., Hyderabad, India furnishes the following information to you:-

We have invented superabsorbent polymers which absorb water, aqueous liquids and blood wherein the polymers of our invention have improved properties. These properties include an improved relationship between gel bed permeability and fluid retention including achieving higher gel bed permeability without the disadvantages of low retention that are characteristics of higher gel strengths.

The super absorbent polymers that are currently available are cross linked poly acrylic acids or cross linked starch-acrylic acid graft polymers, in which some of the carboxyl groups are neutralized with sodium hydroxide solution or potassium hydroxide solution. In particular, gel blocking is a well-known problem that may be associated with the use of superabsorbent polymers in absorbent articles such as diapers. To overcome the above mentioned problem we have invented an absorbing polymer composition that exhibits excellent properties such as capabilities of maintaining high liquid permeability and liquid retention even when the super absorbent polymer is increased in percent by weight based on the absorbent structure.

According to our invention, the superabsorbent polymer composition comprises from about 55 to about 99.9 wt. % of polymerizable unsaturated acid group containing monomers; from about 0.001 to about 5.0 wt. % of internal crosslinking agent; from about 0.001 to about 5.0 wt. % of surface crosslinking agent applied to the particle surface; from 0 to about 5 wt. % of a penetration modifier immediately before, during or immediately after the surface crosslinking step; from 0 to about 5 wt. % of a multivalent metal salt on the surface; from about 0 to 2 wt % surfactant on the surface; and optionally from about 0.01 to about 5 wt% of an insoluble, inorganic powder and from about 0.01 to about 5 wt% of a thermoplastic polymer is applied on the particle surface coincident with or followed by a temperature at least the thermoplastic melt temperature or greater.

The improved properties of superabsorbent polymer are as follows: -

Centrifuge retention capacity of about 25 g/g or more; and a gel bed permeability II of about 300 times 10^{-9} cm^2 or more, or in the alternative, a gel bed permeability I of about 500 times 10^{-9} cm^2 or more and a shear modulus of less than about 9500 dynes/cm².

Further monomers, used for the preparation of the absorbent polymers according to the invention, are 0 to 40 wt.% of ethylenically unsaturated monomers which can be copolymerised with a), such as e.g. acrylamide, methacrylamide, hydroxyethyl acrylate, dimethylaminoalkyl (meth)-acrylate, ethoxylated (meth)-acrylates, dimethylaminopropylacrylamide or acrylamidopropyltrimethylammonium chloride. More than 40 wt.% of these monomers impair the swellability of the polymers.

The internal crosslinking agent has at least two ethylenically unsaturated double bonds or one ethylenically unsaturated double bond and one functional group which is reactive towards acid groups of the polymerizable unsaturated acid group containing monomers or several functional groups which are reactive towards acid groups can be used as the internal crosslinking component and which is present during the polymerization of the polymerizable unsaturated acid group containing monomers.

The absorbent polymers according to the invention can also include from about 0.01 to about 5 wt% of water-insoluble, inorganic powder. Examples of insoluble, inorganic powders include silicon dioxide, silicic acid, silicates, titanium dioxide, aluminum oxide, magnesium oxide, zinc oxide, talc, calcium phosphate, clays, diatomaceous earth, zeolites, bentonite, kaolin, hydrotalcite, activated clays. It is also desirable to employ surface additives that perform several roles during surface modifications. For example, a single additive may be a surfactant, viscosity modifier and react to crosslink polymer chains. The superabsorbent polymers may also include from 0 to about 2.0 wt% of dedusting agents, such as hydrophilic and hydrophobic dedusting agents. Further, additives of the superabsorbent polymers according to the invention may optionally be employed, such as odor-binding substances, such as cyclodextrins, zeolites, inorganic or organic salts and similar materials; anti-caking additives, flow modification agents and the like.

(1 x 30 = 30)

