NALSAR PROXIMATE EDUCATION
NALSAR UNIVERSITY OF LAW, HYDERABAD
P.G.DIPLOMA IN PATENTS LAW

2010-11

Paper II – Practical

(Exploitation of Patents – Drafting, Specification & Patent Writing)

Time: 2 ½ hours. TOTAL MARKS: 60

INSTRUCTIONS TO CANDIDATES

The questions to be interpreted as given and no clarification can be sought from the invigilator.

Draft an Indian Patent Specification for either A or B (any one), based on the respective invention disclosures. Drawings are not needed and do not attach.

A. Sachin is a base ball player and often had a problem in gripping the bat which led to poor play at important matches. He wanted to rectify the same and came up with an invention which will give a better grip to the bat. He approaches you with these details to patent the same and also gives you the figures of his invention. You are required to draft a complete specification based on the inputs given to you:

Injuries are, regrettably, a part of most sporting events and baseball has its share. Considering that a hard projectile (the base or soft ball) is hurled at a person whose sole intent is to strike the projectile (with a bat) and send it back toward a group who hope to stop it somehow and considering that the ball travels at speeds in excess of 70 MPH, it is no wonder players look for ways to reduce the chance of injury.

One potential cause of injury occurs when the batter loses control of the bat and it slips out of his or her hands. Players and nearby spectators can be seriously injured by bats that fly out of a player's hands. In the past, players have used materials such as pine tar on the bat or gloves on their hands to enhance their grip. The "SURE GRIP" hand grip described in the present disclosure reduces the chance of the bat from slipping from the hands of a batter by providing a resilient, cushioned handgrip that can be placed on a handle of a bat.

In one aspect of the present invention, a gripping member, for a handle portion of a bat held in at least one hand of a user, is disclosed. The gripping member has at least one

longitudinally curvilinear shim intimately abutting an outer surface of the handle portion. The shim includes a resilient cushioning member, a first non-slip surface on an outer surface of the cushioning member and a retaining sleeve member intimately abutting, enclosing and securing the at least one longitudinally curvilinear shim to the handle portion. The retaining sleeve member has a heat-shrinkable plastic cover and a second non-slip surface for hand and finger contact.

The resilient cushioning member may be made from a polymer material (having a Durometer value of approximately 80) comprising ITW Decon, Dipropylene, Glycol, Dibenzoate, Aromatic Anine, Epoxidized Soybean Oil, Flexane, Methylene Bis and 4-Cyclohexyl Isocyanate Piem and other materials. The resilient cushioning member may have a truncated ellipsoidal cross-sectional shape.

In another aspect of the present invention, a gripping member, for a handle portion of a bat held in at least one hand of a user is described. The gripping member has at least one longitudinally curvilinear shim intimately abutting an outer surface of the handle portion. The shim has a resilient cushioning member. The cushioning member includes four radial indentations into which the fingers of the at least one hand are placed. There is a first non-slip surface on an outer surface the cushioning member and a retaining sleeve member intimately abutting, enclosing and securing the at least one longitudinally curvilinear shim to the handle portion.

It is an object of this invention to provide a Hand Grip for a Bat for one and two-handed batters.

It is another object of this invention to provide a hand grip for a bat that will reduce the chance for an unwanted release of the bat by a batter

Figures

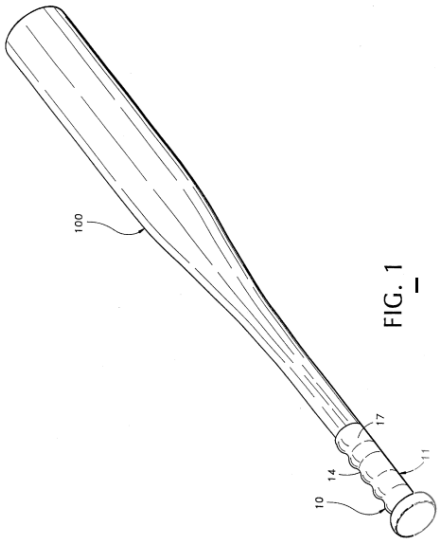

FIG. 1

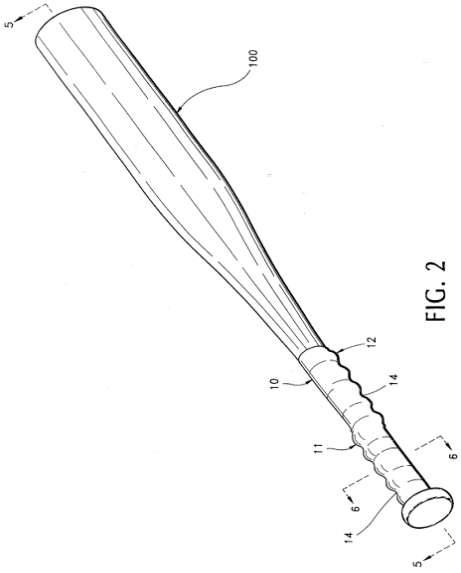

FIG. 2

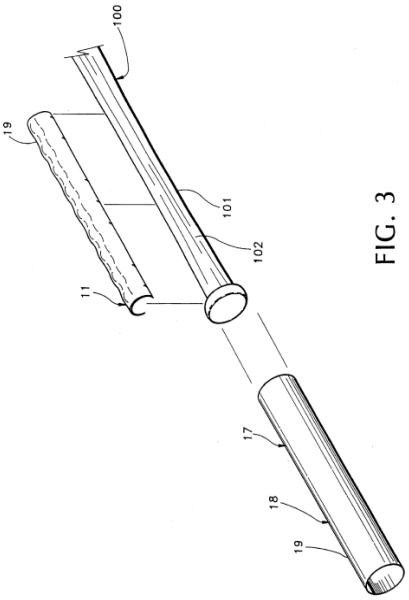

FIG. 3

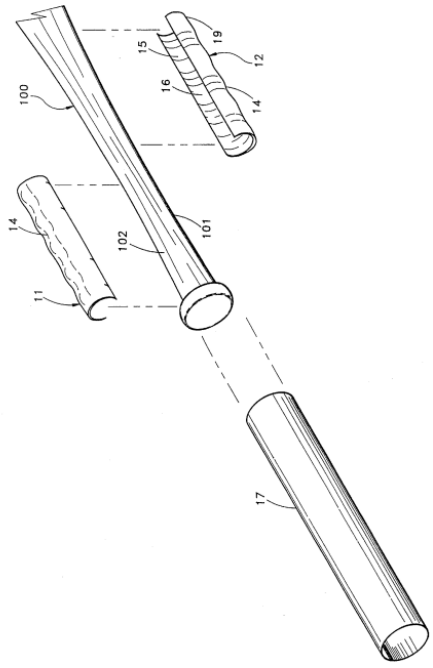

FIG. 4

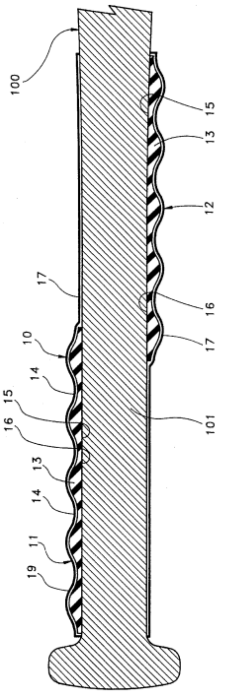

FIG. 5

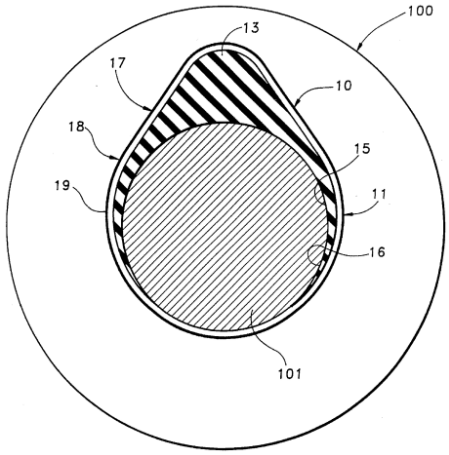

FIG. 6

B. Sania Begum is a dermatologist and has worked on a skin ointment used for various burn and other type of injuries. She has approached you with the following description to file a patent. You are required to prepare a complete specification based on the description below:

The present invention provides a topical medicament useful for the treatment of burns and other injuries to and disorders of the skin and mucosal surfaces of the body, including those injuries that result in the loss of epidermal and dermal substance. "Mucosal surfaces" as used herein includes the mucosal surfaces of the vaginal area and anal area, as well as the buccal and nasal mucosal surfaces. The medicament comprises yellow beeswax (also known as "virgin wax") preferably in an oleaginous base that is pharmaceutically acceptable for topical application to the skin and/or mucosal surfaces of the human body. Preferably, the oleaginous base is a mixture of vegetable and animal oils which, when combined in certain proportions, have been found to provide a topical medicament that leads to rapid healing. The topical medicament of the invention has been found to reduce exudate formation and edema and to help clear skin wounds of necrotic tissue and purulent secretions, thus encouraging the appearance of granulation tissue and re-epithelization. The medicament also possesses anti-inflammatory, analgesic, antibacterial, hemostatic and emollient properties. Advantageously, the product does not adhere to wounds.

In a preferred embodiment, the present invention provides a topical product in which the oleaginous base comprises olive oil, sunflower oil, almond oil, cod liver oil and castor oil. Beeswax is combined with this base and an excipient which is pharmaceutically acceptable for topical application to the skin and/or mucosal surfaces of the human body, so as to provide, for example, a cream, gel, lotion or ointment. Preferably, the excipient provides emollient properties.

Olive oil, almond oil, and castor oil are anhydrous vegetable oils made up of liquid or acid, fatty or saturated triglycerides. Olive oil is obtained from the ripe fruit of Olea europaea and its crop varieties. Sunflower oil is obtained from the seed/fruit of Helianthus annus, and is known to contain about 75 mg Vitamin E (mixed tocopherols) per 100 g. Almond oil is obtained from the seeds of Prunus amygdalus.

Cod liver oil is the oil obtained from the fresh livers of Gadus morrhua and other species of Gadidae. The oil is extracted from the liver using steam, which breaks down the cellular membranes. Once obtained it is frozen and filtered to separate the stearin. Cod liver oil contains predominantly glycerides with non-saturated fatty acids that together comprise morrhuic acid. It also contains cholesterol, but the most important constituents are vitamins A and D, i.e., retinol and cholecalciferol or vitamin D.sub.3. Cod liver oil is known to contain

at least about 850 U.S.P. units (255 .mu.g) of Vitamin A per gram, and at least about 85 U.S.P. units (2.125 .mu.g) of Vitamin D per gram.

Castor oil is the cold-drawn oil of the seeds, stripped of the episperm, of Ricinus communis and other members of its family Euphorbisceae. It is a slightly yellow to colorless thick, viscous liquid with mild odor or odorless and subtle taste.

As used herein the term "virgin wax" or "yellow beeswax" refers to the product of fusion and purification of the honeycomb of the Apis mellifera (Apidae) bee after the honey has been separated. Preferably, the topical medicament contains between about 10 and about 50 percent by weight of yellow beeswax, more preferably between about 18 and about 27 percent, and even more preferably between about 23 and about 25 percent. Concentrations greater than about 50 percent by weight generally are not preferred because of the solid consistency of beeswax resulting in an undesirably high viscosity or hardness of the final product. Percentages are expressed throughout this application as percent by weight, based upon the total weight of the product, unless otherwise noted.

Advantageously, the topical medicament contains Vitamins A, D and E. Synthetic versions of these vitamins can be added during formulation, or, preferably, the vitamins can be added via the inclusion of their natural sources, for example, cod liver oil and sunflower oil. The amounts of these vitamins can be varied, as can their sources. Preferred formulations of the medicaments can contain, per 100 g of the final formulation, between about 1275 and about 3825 .mu.g Vitamin A, preferably about 2550 .mu.g; between about 10.625 and about 31.875 .mu.g Vitamin D, preferably about 21.25; and between about 975 and about 3000 mg Vitamin E, preferably about 2025 mg.

The excipients used in the topical medicament of the present invention are comprised primarily of emollients. Emollients are lipids or substances with a similar consistency which, when applied to the skin, protect and soften the skin, making it more supple. Emollients are used primarily as the excipients and bases of ointments and other dermatological preparations. A simple classification of emollients is as follows:

1) Oil-based: Oil-based emollients include fats. These products are anhydrous, do not absorb water and are insoluble in it, and are non-washable. Oil-based emollients include: a) hydrocarbons or mineral fats obtained by the distillation of petroleum (petroleum jelly); b) vegetable oils and liquid triglycerides; c) animal fats or solid natural triglycerides.

2) Absorbent bases: These bases are anhydrous and insoluble in water, and are hydrophilic. They typically form water-like emulsions in oil and, thus, can incorporate substances in aqueous solutions. In addition, they are largely non-washable. Absorbent bases include: a)

Lanolin or wool fats that are obtained from sheep's wool and made up of fatty acids and cholesterol esters; and b) cetyl and stearyl alcohols, which are solid alcohols obtained by hydrogenation of their respective acids.

3) Emulsive bases: These bases absorb-water, but are insoluble in it, forming water emulsions in oil that are not very washable and can be easily removed from the skin. They include surface active agents (surfactants) which improve wetting of surfaces. They include: a) soaps or salts of fatty acids that may be acidic or basic depending on whether the lipophilic group is anionic or cationic; b) sulfated alcohols which are semi-synthetic substances; and c) synthetic surface active agents.

4) Water soluble bases: These bases are anhydrous, absorb water, and are completely soluble in water. They are also non-fatty and washable. For example, glycerine is obtained from fats and, due to its hydrophobicity, has the property of extracting water from the surface of the mucosa or denuded skin. It does not damage intact skin.

Emollients for ointments	1) Oil-based	Hydrocarbons Animal fats	E.g.: Petroleum Jelly
		Vegetable oils Waxes	eg: Castor oil Peanut oil e.g.: sperm oil
	2) Absorbent bases	Cholesterol Lanolin Cetyl alcohol Stearyl alcohol	
	3) Emulsive bases	Sulfated alcohols Synthetic surface-active agents Acid soaps Basic soaps	 e.g.: Stearic acid
	4) Water-soluble bases	e.g. Glycerine	

When applied to the skin, these substances, which are in general chemically inert, have a protective and emollient action. The protective action occurs on healthy and diseased skin and prevents the effects of chemical, mechanical, and physical (cold, wind) irritants while decreasing burning and pruritus and producing an anti-inflammatory effect. Since these substances form a more or less impermeable layer over the skin, they prevent drying of the

epidermis over the stratum corneum by decreasing the evaporation of water from the cutaneous surface. Thus, the skin is softer and more supple. In this way, emollients mimic the natural sebaceous layer that covers normal skin. The bases envisioned for use in the present invention, including the water soluble ones, are well absorbed by the skin, but almost not at all by the epidermis or the sebaceous glands of the hair follicles.
In practicing the present invention, preferably the excipient is comprised of stearic acid and liquid petroleum jelly, with butylhydroxytoluene (BHT) as a preservative and, optionally, herbal essence. Other excipients can be used in lieu of petroleum jelly, such as olive oil, cod liver oil and other natural oils, depending upon the ultimate consistency that is desired which, in turn, depends upon the ultimate use to which the product will be put. Additionally, other preservatives can be substituted for or used in combination with BHT.

Stearic acid is a mixture of solid fatty acids in variable proportions. It is an absorbent, anhydrous, and non-water soluble base which forms water-type emulsions in oil. When combined with the oil bases, stearic acid increases their consistency (viscosity) and makes them hydrophilic. As used herein, the term herbal essence refers to any of the well-known extracts of aromatic plants, such as an aromatic extract of chamomile.

The topical product of the instant invention, which can be in the form of, for example, a cream or an ointment, can be formulated as products specifically adapted for a variety of applications including skin, vaginal, and proctological creams/ointments. Regardless of the specific formulation and the environment in which the product is utilized, the topical product of the invention shows ability to stimulate granulation and re-epithelization and to act as an anti-pruritic surface analgesic and anti-inflammatory agent.

In treating a subject with a the topical medicament of the present invention, including subjects with venous diseases and ulcerations, the medicament, when in the form of a skin cream or ointment, is preferably spread on a gauze compress to be placed on the effected zone, following which a soft occlusive bandage is applied. When placed over the injury, the compress should extend beyond the injury, for example by about two-thirds of a centimeter. This regimen is repeated about 3 times daily at the beginning of treatment and then less frequently as a favorable course of treatment is observed. The total time of treatment depends upon how rapidly the healing process progresses. In minor household burns, however, as well as in sunburn, the topical medicament of the invention can be applied directly to the affected skin. When treating gynecologic and proctologic conditions, preferably the topical medicament of the invention is administered using a variety of disposable vaginal and proctological applicators as are well known.