Nov. 12, 1957 J. T. GIULIANO 2,812,768

ARTIFICIAL EYELASH STRIP

Filed Jan. 26, 1955

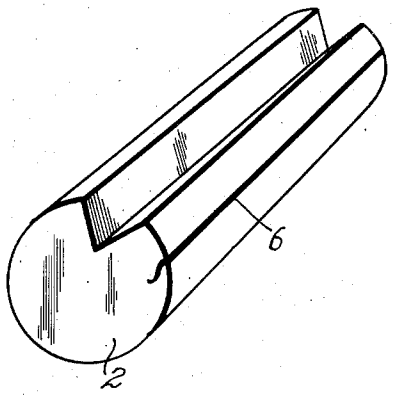


FIG. 1

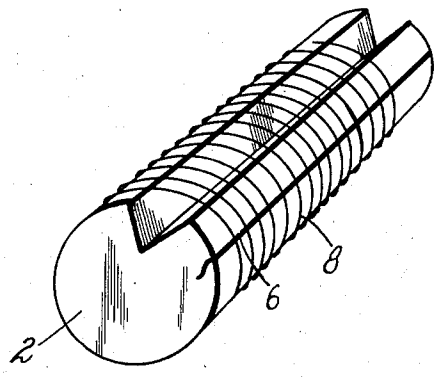


FIG. 2

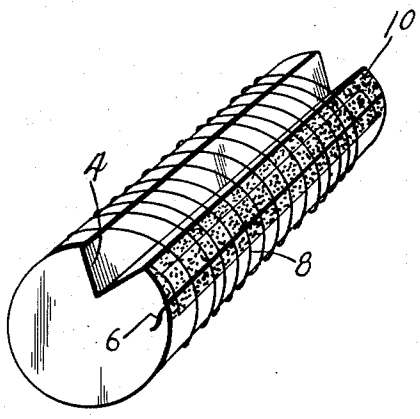


FIG. 3

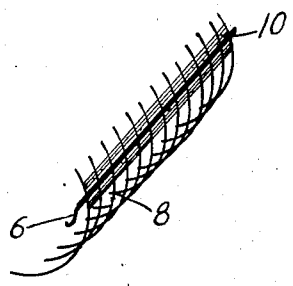


FIG. 4

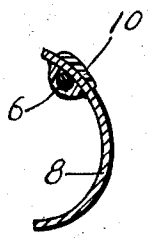


FIG. 5

INVENTOR.

James T. Giuliano

BY W. A. Hamilton

ATTORNEY

United States Patent Office

2,812,768

Patented Nov. 12, 1957

2,812,768

ARTIFICIAL EYELASH STRIP

James T. Giuliano, Wakefield, Mass.

Application January 26, 1955, Serial No. 484,210

6 Claims. (Cl. 132—5)

This invention relates to artificial eyelashes and, more particularly, to a method of mechanically producing continuous lengths of eyelash material in a rapid and practical manner, from which material relatively smaller eyelash sections may be cut off in desired lengths.

Many attempts have been made in the art to produce artificial eyelashes on a commercially significant scale but none of these have, so far I am aware, resulted in a satisfactory method of providing eyelash material on a production basis and at a cost consistent with merchandizing requirements.

It is an object of the present invention to devise an improved eyelash material and to provide especially a method of efficiently producing continuous lengths of eyelash material from which desired lengths may be cut off and trimmed. Another object of the invention is to provide continuous lengths of eyelash material in which there is found a unique elasticity characteristic which results in the constituent eyelash components taking on a very desirable flexibility. Still another object of the invention is to provide a method of forming eyelash material in which special attention is given to removal and trimming of the material after it has undergone a curling and setting operation.

These and other objects and novel features will be more fully understood and appreciated from the following description of a preferred embodiment of the invention selected for purposes of illustration and shown in the accompanying drawings, in which

Fig. 1 is a perspective view of a forming roll employed in carrying out the method of the invention;

Fig. 2 is another perspective view of the forming roll and illustrating further the step of winding an eyelash material around the roll;

Fig. 3 is still another view of the forming roll illustrating the step of applying a plastic covering material to the eyelash material and the roll;

Fig. 4 is a perspective view illustrating a length of eyelash material which has been formed on the roll member of Fig. 3 and removed therefrom; and

Fig. 5 is a detail cross-sectional view of an artificial eyelash.

In accordance with the method of the invention, I provide a forming roll **2** of some suitable material, such as steel, along the periphery of which is constructed a cutting groove or slot **4**. This roll may be supported in various ways of well-known character and not shown in the drawings. For example, the roll may be supported in a machine of the general nature of a lathe so that a constant rotation of the roll may be effected and so that a filament feeding device may be allowed to travel along the roll in the well-known manner of operation of lathes.

With this forming roll **2** and a turning means such as described, I then carry out the novel winding steps of the invention. A thread-like length of plastic filament **6** is first placed along the roll surface of roll **2** in the manner suggested in Fig. 1 so that the thread lies in spaced relation to the slot **4** as indicated in Fig. 1. This filament

may consist of a translucent non-toxic synthetic resin of the type comprised by one of the family of vinyl resins. If desired, I may employ a plurality of these filaments arranged in spaced-apart relationship around the roll periphery. Secondly, a continuous length of eyelash filament **8** is wound around the roll **2** with each turn being spaced apart a desired distance to simulate an eyelash spacing and, in each case, passing over the member **6**, as suggested in Fig. 2. The eyelash filament material may also consist of a synthetic plastic, such as a vinyl resin.

The roll with filament wound thereon, as shown in Fig. 2, is then subjected to a coating operation in which a coating **10** of plastic material also of the vinyl resin type is applied over the surface of the roll included between the edge of slot **4** and the filament member **6**. This coating will then overlie the member **6**, the included turns of filament **8**, as well as the intervening surfaces of the roll occurring between the turns.

While thus supported and covered with plastic coating, the turns of filament **8** are then subjected to heat to carry out a resin curving step. Temperatures of conventional curving magnitudes may be employed with the result that each turn of filament **8** is caused to take on an arcuate set while on the forming roll **2**.

I then subject the roll and wound filament assembly to a cutting operation in which a cutting tool is passed along the unsupported portions of the turns at points between the edges of the roll defining the slot **4**. This leaves a series of several filament ends which make it possible to mechanically separate the ends from the adjacent coated surfaces of the roll occurring between each filament turn. A second cutting operation can then be carried out in close proximity to the filament **6** throughout the length of the roll **2** using either a cutting disc or a reciprocating blade, and there is then produced a length of eyelash material which may be divided into desired sizes of eyelash material.

This eyelash material is characterized by a highly desirable resiliency which is imparted by applying a vinyl resin of a type which dries to an elastic condition. Since portions of this vinyl resin are present at one side of each eyelash fiber as well as along the filament **6**, both of these bodies are characterized by a desirable elasticity which permits shaping to the contour of an eyelash and retention by means of adhesive means without loss of curling. Moreover, the eyelash material is held together by the combined bonding action of the translucent filament **6** and the outer coating material **10** which operate to seal the ends of the eyelash fibers therebetween in firmly anchored relationship. In the form in which the eyelash material comes off the roll **2**, it is very convenient to undergo turning and shaping.

While I have shown preferred embodiments of the invention, it should be understood that changes and modifications may be made in keeping with the scope of the appended claims.

I claim:

1. That improved method of forming eyelash material which comprises winding a length of eyelash filament in a helical path along a supporting filament resting on a cylindrical supporting surface to produce a series of coils spaced along said supporting filament, in overlapping relationship with respect to said supporting filament, applying a coating material to the base filament and the coils and then cutting the coils along a line parallel with the said base filament.

2. A method according to claim 1 in which the coils are cut along a second line of cutting lying outside of the area of contact of the coating material.

3. Method of forming an eyelash material which comprises supporting a length of filament along a cylindrical

supporting surface in spaced relation to a recess in said surface, winding an eyelash material in a helical path around the cylindrical surface in overlapping relationship with respect to the length of filament to produce a series of coils spaced along the length of filament, each coil resting on the filament at its point of contact therewith, portions of the eyelash material being disposed in an unsupported position at points overlying the recessed part of the cylindrical surface, applying a coating material to the eyelash surface and overlying filament and eyelash material portions occurring between the recess and the filament heating the coating material, cutting the coils of eyelash material at points at which they are unsupported and then cutting the coils along a second line of cutting extending outside of the coating material.

4. As an article of manufacture an improved artificial eyelash material comprising a carrier filament, a plurality of eyelash elements superimposed transversely upon the carrier filament in substantially uniformly spaced-apart relationship, a thin body of elastic coating material adhesively secured to the eyelash elements and filament, said elastic coating material occurring along one side only of the carrier filament and attached eyelash elements

thereby to impart a selective resiliency to the eyelash material along its longitudinal length.

5. A structure according to claim 4 in which the eyelash material presents short anchoring ends projecting beyond the carrier filament in spaced-apart relation.

6. As an article of manufacture an improved artificial eyelash material comprising a carrier filament, a plurality of eyelash elements located closely adjacent to one another and superimposed transversely upon the carrier filament, and a thin body of elastic coating material adhesively secured to portions of the filament and to the eyelash elements to define a series of interstices occurring between the points of contact of the eyelash elements with the carrier filament whereby a selective resiliency is produced along the longitudinal length of the material to provide for a substantially uniform arching of the eyelash material when conformed to the contour of an eyelid.

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