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ARTIFICIAL HAIR

Milton H. Schwarz, Westport, Conn., and Marvin E. Goldberg, Monsey, N.Y., assignors to Revlon, Inc.

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ABSTRACT OF THE DISCLOSURE

Artificial fibers for wigs and hairpieces comprising mixtures of fibers of different denier have the soft, natural feel and the bulk, body and appearance of natural hair.

This invention relates to wigs. It particularly relates to wigs having a hair portion composed of artificial fibers.

Wigs that are now marketed have hair portions which are composed of either natural hair or artificial fibers such as, for example, Dynel. In constructing wigs having a natural fiber hair portion, fibers of substantially the same thickness or in a range of substantially the same thickness are used. At present, fibers of a single denier of from about 40 to 50 or fibers having denier range from about 40 to 50 are used. Dynel of 24 denier has been used for hairpieces, and is superior to natural hair for such purposes since once the Dynel has been given a desired curl the curl lasts much longer than with natural hair. Such artificial hair portions have a coarse, unnatural feel and appearance. While natural hair can be used in place of artificial fibers to overcome these defects, natural hair is not always readily available and is considerably more expensive than the natural fibers.

It is, accordingly, an object of the present invention to provide wigs having hair portions of artificial fibers which hair portions have a soft, natural feel.

It is another object of the present invention to provide wigs with artificial hair portions having the appearance of natural hair.

It is a further object of the present invention to provide wigs or hairpieces having the body and bulk of natural hair.

These and other objects and advantages of the present invention will become apparent from the description which follows:

We have found that by using in the hair portion of wigs artificial fibers of different thicknesses, we obtain hair portions which have a natural feel and appearance and also have greater bulk or body. In practicing our invention we incorporate fibers of a lower denier with fibers of a higher denier, the lower the denier the thinner the fiber. While fibers of single high denier may be mixed with fibers of a single lower denier, in practicing our invention we prefer to use mixtures of fibers in ranges of high denier and ranges of lower denier. Desirably, we incorporate mixtures of fibers having a denier in the range of from about 40 to 50 with mixtures of fibers having a denier from about 15 to 30, with a more narrow range of about 24 being preferred.

The fibers of lower denier are present in an amount of from about 5 to 30% by weight of the mixture of fibers, the fibers of higher denier being present in an amount of from about 70 to 95% by weight of said mixture. Preferably, the lower denier fibers are used in a range of about 10 to 20% by weight. Since the bulk of the mixture depends upon the amount of lower denier fibers present therein, the bulk can be increased or decreased as desired by increasing or decreasing therein the amount of lower denier fibers.

While Dynel, a polymer containing about 40% acrylonitrile and about 60% vinylchloride, is the fiber of choice, other artificial polymeric fibers such as Kanekalon, a

fiber containing 40–45% acrylonitrile and 55–60% vinylchloride, Teklan, a fiber containing about 49% each of acrylonitrile and vinylchloride and 2% of other monomers, and nylon, poly(hexamethylene adipamide) may be used. While mixtures of two or more fibres of different chemical constitution may be mixed for incorporation into the wig, we prefer to use fibers of the same or substantially the same chemical composition, particularly when a curl is to be imparted to the fibers. We have found that different temperatures are required for curling different fibers, and it is, therefore, desirable to use fibers that are substantially chemically the same.

In practicing our invention we mix the desired amounts of the selected fibers of different denier to form a substantially uniform mixture of the fibers. The mixing is carried out by hackling, a commonly used procedure in the fiber industry which is described by Carswell in the Handbook of Industrial Textiles, page 89, First Edition, 1963, published by Wellington-Sears Co., West Point, Ga. If desired, the fibers could then be treated to impart curls thereto.

The mixture of fibers is then incorporated into the portion of the wig holding such fibers in accordance with methods of attaching fibers or natural hair as disclosed in U.S. Pats. Nos. 3,485,249; 3,520,309 and 3,520,310.

In accordance with our invention, we have prepared the following mixtures of fibers as set forth in the table below:

Example No.	Fiber	Denier	Percent by weight
1	Dynel	40	95
	do	24	5
2	Dynel	40	80
	do	24	20
3	Dynel	50	95
	do	24	5
4	Dynel	50	75
	do	24	25
5	Dynel	40-50	90
	do	15-30	10
6	Dynel	40-50	70
	do	15-30	30
7	Dynel	40-50	95
	do	24	5
8	Dynel	40-50	90
	do	24	10
9	Dynel	40-50	85
	do	24	15
10	Dynel	40-50	80
	do	24	20
11	Dynel	40-50	70
	do	24	30
12	Dynel	24	25
	Nylon	40-50	75
13	Dynel	40-50	60
	Nylon	40-50	25
	Dynel	24	15
14	Nylon	24	20
	do	40-50	35
	Dynel	40-50	45
15	Dynel	40-50	90
	Kanekalon	24	10
	Dynel	24	10
16	Kanekalon	40-50	50
	Nylon	40-50	40
	Dynel	24	10
17	Teklan	40-50	60
	Kanekalon	40-50	30
18	Nylon	24	15
	Kanekalon	40-50	85
19	Teklan	24	15
	Nylon	40-50	85
20	Teklan	24	15
	do	40-50	85
21	Nylon	24	20
	do	40-50	80

The hair portions of wigs prepared from the above mixtures were soft to the touch and had a bulk substantially that of natural hair.

By blending not only fibers of different denier but of different colors, the most natural looking and feeling wigs were obtained. Thus, when a medium brown wig was desired, it was found preferable to use a mixture containing light, medium and dark brown fibers instead of just using a medium brown fiber. In general, a mixture

of 3 to 10 different fibers of different shades will give the best color appearance, and a fiber of any single shade should not be used in an amount above 80% of the total weight. It is also possible to mix fibers of different colors, such as, for example, brown and blond, to give desired shades.

We claim:

1. A wig having a hair portion consisting essentially of a mixture of from 5 to 30% by weight of a fiber having a denier from about 15 to 30 and from 95 to 70% by weight of a fiber having a denier from about 40 to 50, said fibers being a synthetic polymer selected from the group consisting of poly(hexamethylene adipamide) and copolymers of acrylonitrile and vinyl chloride.

2. A wig according to claim 1 consisting essentially of from 5 to 20% by weight of a 24 denier fiber and from 95 to 80% by weight of a 40–50 denier fiber.

3. A wig according to claim 2 consisting essentially of about 10% by weight of a 24 denier fiber and about 90% by weight of a 40–50 denier fiber.

4. A wig according to claim 3 wherein the fiber is a copolymer containing about 40% acrylonitrile and 60% vinylchloride.

5. A wig according to claim 3 consisting essentially of 10% by weight of a 24 denier fiber and about 90% by weight of a 40 denier fiber.

6. A wig according to claim 3 consisting essentially of 10% by weight of a 24 denier fiber and about 90% by weight of a 50 denier fiber.

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ROBERT F. BURNETT, Primary Examiner

L. KOECKERT, Assistant Examiner

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