

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



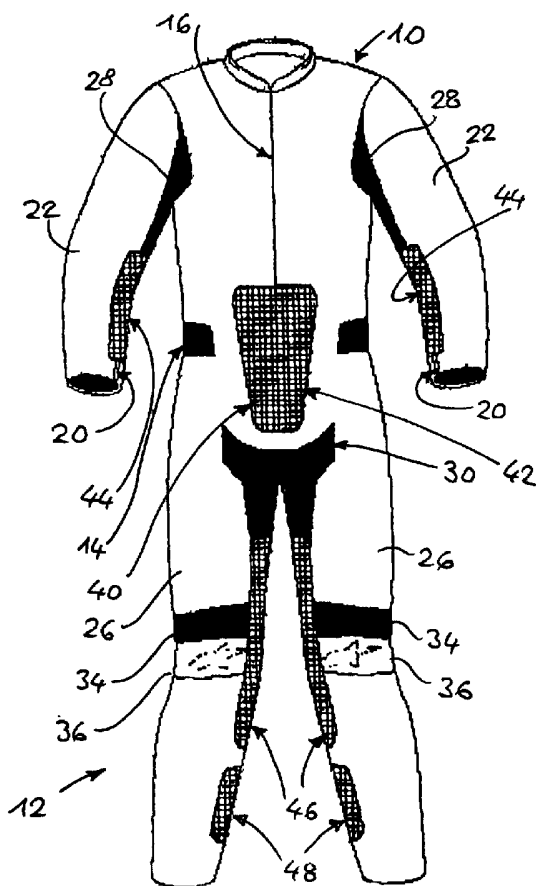
(43) International Publication Date  
27 February 2003 (27.02.2003)

(10) International Publication Number  
**PCT**  
**WO 03/015549 A1**

- (51) International Patent Classification<sup>7</sup>: **A41D 1/08**, 13/05, 13/02
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- (21) International Application Number: PCT/IT01/00445
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (22) International Filing Date: 21 August 2001 (21.08.2001)
- (25) Filing Language: Italian
- (26) Publication Language: English
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- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
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[Continued on next page]

(54) Title: SPORTS DRESS HAVING SLIP RESISTANT SURFACE ZONES



(57) Abstract: Sports dress, in particular for motor-cyclists, characterized in that, in correspondence of parts of the body of the wearer which, under use conditions, are in touch with or, at least, graze parts of the motor-cycle, on the outer surface thereof there are provided zones (40, 42, 44, 46, 48) that are fabricated with slip-resistant materials.

WO 03/015549 A1



**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

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**SPORTS DRESS HAVING SLIP-RESISTANT SURFACE ZONES****DESCRIPTION**

The present invention refers to an article of sportswear, in particular a motor-cyclist dress.

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The state of the art in the field of sportswear for motor-cyclists and the like is mainly focused on the general goal of ensuring the best possible protection of the wearer's body against both the environmental conditions (air, rain, cold, and the like) and the effects of possible falls occurring when racing or travelling at high speed. This can be inferred not only from the kind of dresses that are currently sold on the market, but also from the disclosures in the technical literature - see for

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example the patent applications WO-A-90 03126 and WO-A-99 00030.

What has on the contrary been largely underestimated hitherto is the importance for a motor-cyclist to be able to avail himself dresses that are adapted to remain as far as possible adhering to the motor-cycle when, above all during sports races at very high speed, the driver takes a so-called stream-lined position. Possible vortices brought about by air flows in the zones in which the body of

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the driver is close to, but not quite in touch with the motor-cycle may in fact give rise to unbalances in the drag which may impair the wearer safety.

The state of art which appears to fall closest to the object of the present invention consists, to the best knowledge of the Applicant, in the habit developed by some sport motorcyclists to apply strips of sandpaper onto some surface zones of the motor-cycle, eg. of the fuel tank, to the purpose

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of braking the sliding tendency of the parts of said dresses that come into contact with said surface zones when manoeuvring, eg. when the body of the driver is stooped into a so-called stream-lined position and/or bent when taking a curve.

It is therefore a main purpose of the present invention to provide a dress for motor-cyclists

which is capable of meeting also the above mentioned, hitherto underestimated requirements with means that not only are as much effective as they are simple, but also impose just a definitely marginal increase in manufacturing costs, so that they can be used throughout the product range and not only in the most sophisticated and expensive articles.

5 In view of reaching this and further aims, the invention provides a dress having the characteristics recited in the appended claims, as this can be more clearly and readily understood from the description that is given below by way of non-limiting example of a preferred, although not sole embodiment with reference to the accompanying drawing, in which:

- Figure 1 is a front view of a suit according to the present invention;
- 10 – Figure 2 is a rear view of the same suit.

The suit illustrated in the Figures comprises a jacket 10 and a pair of trousers 12 that are inseparably joined with each other by a band 14 of elasticised ribbon. In order to be capable of being put on, the suit is provided frontally with a central aperture 16 extending from the collar 18 down to almost the joining seam of the two legs 20 of the trousers 12, as well as an aperture 20 along each sleeve 22 of the jacket 10, close to the wrist zone thereof (see Figure 1), and an aperture 24 in each one of the legs 26, close to the free end thereof (see Figure 2). All these apertures 16, 20, 24 are adapted to be closed by means of, say, zip-fasteners or the like.

In a traditional manner, the suit has a composite structure which is comprised of an outer surface layer, impermeable to air and, preferably, also to water (eg. made of natural or synthetic skin), a padding layer and an inner lining.

Covered with a wear-resistant material there are furthermore some particular surface zones of the dress, and namely:

- the zones, generally indicated at 28, which extend on the front side of the sleeves 22 between the armpits and the elbows;
- 25 - the zone, generally indicated at 30, which lies between the inguinal portion of the trousers 12 and the upper portion of the legs 26;
- the zones, generally indicated at 34, which are situated above the knee-pads 36 – see Figure 1; and
- the zones, generally indicated at 32, which extend along the calves up to the knees – see 30 Figure 2.

According to the present invention, covered with a slip-resistant material there are finally some surface zones of the dress which, during use, come into contact with the body of the motorcycle, and namely:

- the zones, generally indicated at 40 and 42, which correspond to the abdomen and, possibly, also to the lowest ribs of the driver, on both the right side and the left side of the aforementioned central aperture 16;

5 - the zones, generally indicated at 44, that extend along the sleeves 22 in correspondence of the forearms of the wearer, above the aperture 20;

- the zones, generally indicated at 46, which extend along the inner side of the legs starting from the already mentioned zone 30 of the suit which is abrasion-resistant down to well beyond the knee-pads 36;

10 - the zones, generally indicated at 48, which are situated along the inner side of the legs 26 in correspondence of the calves of the wearer.

As a slip-resistant materials suitable for use in view of providing the above mentioned zones 40, 42, 44, 46 and 48 of the dress there can be considered, for example, a slip-resistant elastomer, such as nitrile rubber, possibly including such an abrasive as pumice in the mixture, strips of which are attached on to the desired zones of the outer surface layer of the suit by sewing, seaming,  
15 ultrasonic welding, bonding or any other of a number of per se known methods. As an alternative thereto, use can also be made of rubber strips featuring a particularly rough pattern or texture or of a so-called loop-and-hook material, generally known under the trademark Velcro®.

Quite obviously, the corresponding surface zones of the motor-cycle, eg. of the fuel tank or the frame thereof, may themselves be clad with similar materials or, anyway, with materials that are  
20 compatible with the ones used on the zones 40, 42, 44, 46 and 48 of the dress.

Although the above description refers to a dress, it will be appreciated that the present invention is to be understood as covering any single, albeit simpler garment such as a jacket or a pair of trousers.

It will be finally appreciated that the invention may be implemented according to  
25 embodiments differing from the above described one, without of course departing from the scope of the present invention as defined by the appended claims.

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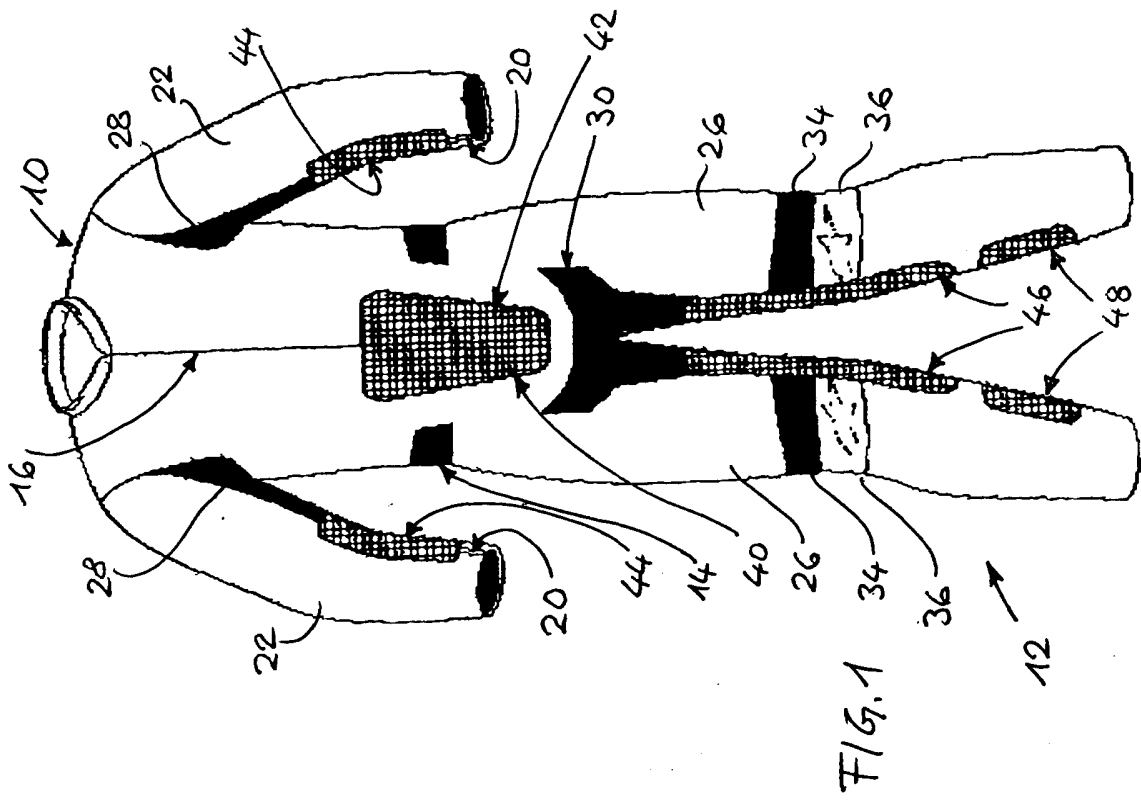
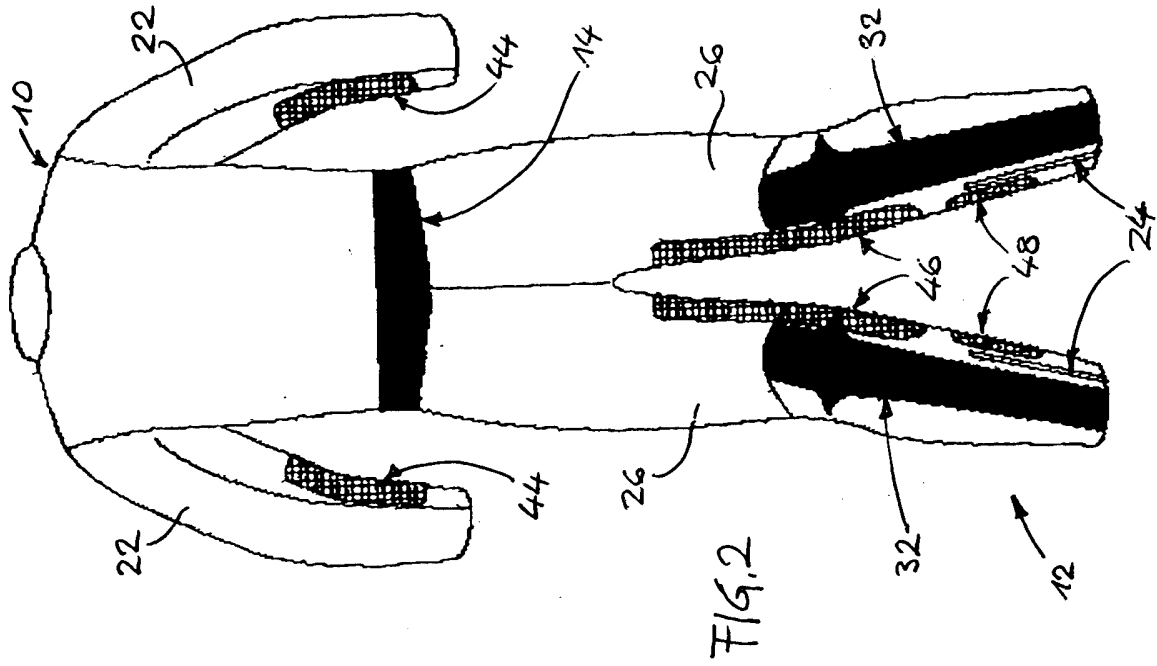
**CLAIMS**

1. Sports dress, in particular for motor-cyclists, **characterized in that**, in correspondence of parts of the body of the wearer which, under use conditions, are in touch with or, at least, graze parts of the motor-cycle, on the outer surface thereof there are provided zones (40, 42, 44, 46, 48) that are fabricated with slip-resistant materials.
2. Sports dress, in particular jacket for motor-cyclists with a front central aperture (16), **characterized in that** a portion (40, 42) of said zones fabricated with slip-resistant materials is provided in correspondence of the abdomen and possibly also the lowest ribs of the wearer, on both the right side and the left side of said central aperture (16).
3. Sports dress, in particular jacket for motor-cyclists according to claim 2, **characterized in that** zones (44) fabricated with slip-resistant materials are provided also in correspondence of the forearms, above the possibly provided aperture (20) of the sleeve portions that can close in the wrist of the wearer.
4. Sports dress, in particular trousers for motor-cyclists, **characterized in that** zones (46) fabricated with slip-resistant materials are provided along the inner side of the legs starting from portions (30) of the same trousers that are provided as a protection of the groin, and extending down beyond the portions (36) that are provided as a protection of the knees of the wearer.
5. Sports dress, in particular trousers for motor-cyclists according to claim 4, **characterized in that** zones (48) fabricated with slip-resistant materials are provided along the inner side of the legs of the wearer, in correspondence of the calves thereof.
6. Sports dress according to any of the preceding claims, **characterized in that** said zones (40, 42, 44, 46, 48) fabricated with slip-resistant materials are provided in the form of strips of elastomeric material of various sizes and conformations, in which said strips are attached by means of ultrasonic welding, sewing, bonding or some other per se known method.
7. Sports dress according to any of the preceding claims, **characterized in that** said slip-resistant zones (40, 42, 44, 46, 48) are fabricated with elastomeric material, such as for example nitrile rubber.
8. Sports dress according to claim 7, **characterized in that** in the mixture of said elastomeric material there is included an abrasive material, such as pumice.
9. Sports dress according to claim 7, **characterized in that** on the surface of said elastomeric material there is imprinted a particularly rough pattern.
10. Sports dress according to any of the preceding claims, **characterized in that** said slip-resistant zones (40, 42, 44, 46, 48) are fabricated with so-called loop-and-hook material, generally

known as Velcro®.

11. Sports dress according to any of the preceding claims, **characterized in that**, in correspondence of other parts of the body of the wearer differing from those involved by said zones (40, 42, 44, 46, 48) fabricated with slip-resistant materials, zones (28, 30, 32, 34) of the outer surface thereof are fabricated with wear-resistant materials.

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## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IT 01/00445

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A41D1/08 A41D13/05 A41D13/02		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) IPC 7 A41D A41B		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 845 778 A (PETERSON LESLIE A) 11 July 1989 (1989-07-11) column 1, line 27 - line 35 column 1, line 37 - line 45 column 3, line 28 - line 30; figures 2,4 ---	1,4,6,7, 9
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
° Special categories of cited documents : *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family		
Date of the actual completion of the international search  16 April 2002		Date of mailing of the international search report  22/04/2002
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  Monné, E

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PCT/IT 01/00445

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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Information on patent family members

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