

Sock, especially a sock dedicated to sports activities

Patent number: WO2021/229421

Date of publication: 2021-11-18

Applicant(s): DI LEO CRISTIAN

Inventor(s): DI LEO CRISTIAN

Abstract

A sock for sports activities comprising a foot part (1) intended to overlap a user's foot and which sock is provided on the outer surface with anti-slip elements (4), having at least a predetermined shape, at least a predetermined dimension relative to the surface extension of the sock and at least a predetermined thickness, and which anti-slip elements (4) are distributed according to at least a predetermined pattern and with at least a predetermined density over the extension of a knitted fabric that forms the sock. Said sock also has at least one area provided with anti-slip elements (2) on the internal surface of the said fabric, which anti-slip elements (2) are incorporated into the stitches of said fabric and have sections exposed to direct contact with the foot of the user and which elements are not protruding outward from said inner surface.

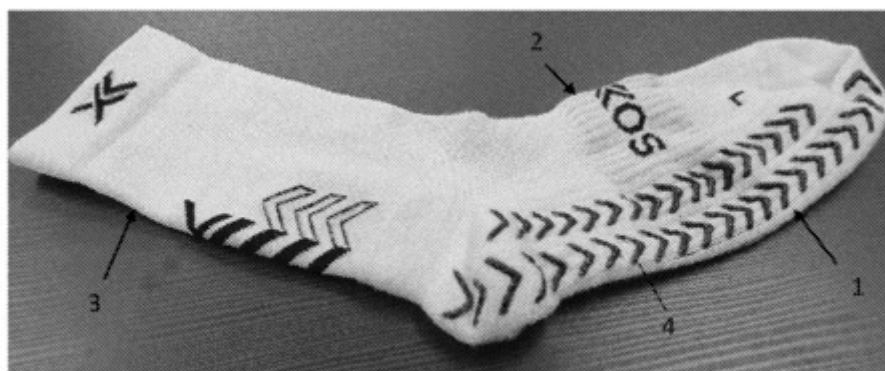


Fig. 2

Training vest apparatuses of multi-resistance for sports performance, military training, flotation device and for leisure activities

Patent number: WO2021/214639

Date of publication: 2021-10-28

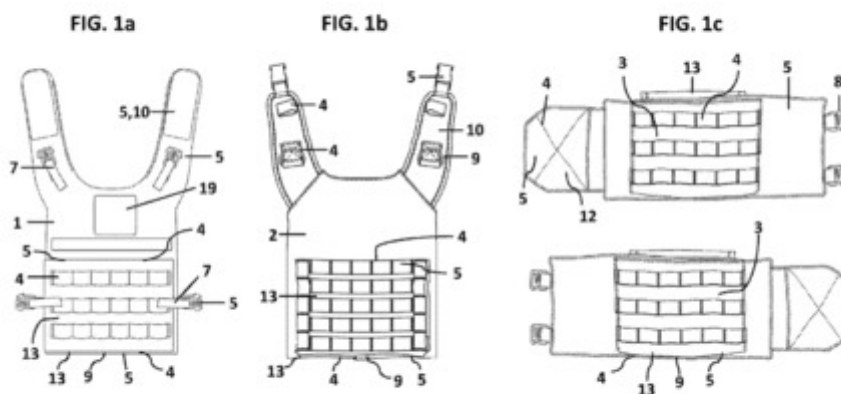
Applicant(s): BASSOO NAIPAUL

Inventor(s): BASSOO NAIPAUL

Abstract

There is disclosed herein a training vest apparatus including a body portion of the apparatus, one or more resistance elements attachable to the body portion. The vest is adapted for movement between an assembled closed configuration wherein one or more of the resistance elements is attached to the body and a disassembled open configuration. The apparatus includes fasteners and adjustable working straps to fit the body portion of a user and to correct the user posture. The resistance elements for sports performance comprises of one or more sling bands, wherein one or more of the sling bands comprises of a limb strap. The apparatus includes a removable or fixed hydration pack, molle for a military appearance and reinforcement for attachable objects. Removable weights such as mental plates and filler weights can be added for weight training with a transition to minimal to no weight to use as a flotation device.

FIG. 1



Headset for illuminating retroreflective items

Patent number: US20210311322

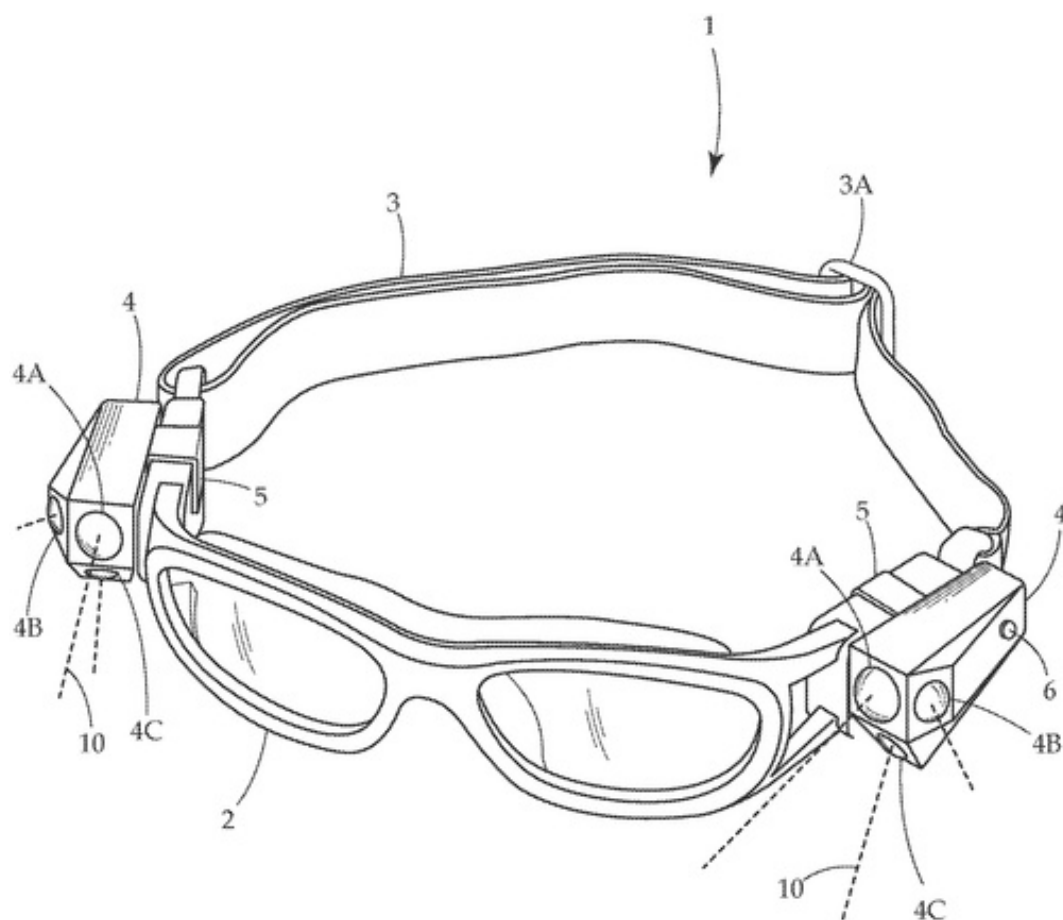
Date of publication: 2021-10-07

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Inventor(s): BELANGER JONAH, RICHARDS RYAN FITZPATRICK, SOSSONG CHRISTOPHER

Abstract

A headset for illuminating retroreflective items is disclosed herein. The headset is comprised of glasses, goggles, or other head-mounted assembly with light arrays mounted thereon. The lighting from the light arrays can be directed at a surface which illuminates when a light is directed at it, such as a retroreflective material. The present disclosure may advantageously be used with balls, articles of clothing, masks, paint, and numerous other items that may be covered, all or partially, with a retroreflective coating or layer, to create a unique user experience, particularly when the headset and retroreflective items are used in combination under low light or no light conditions.



Protective headgear

Patent number: US20210337912

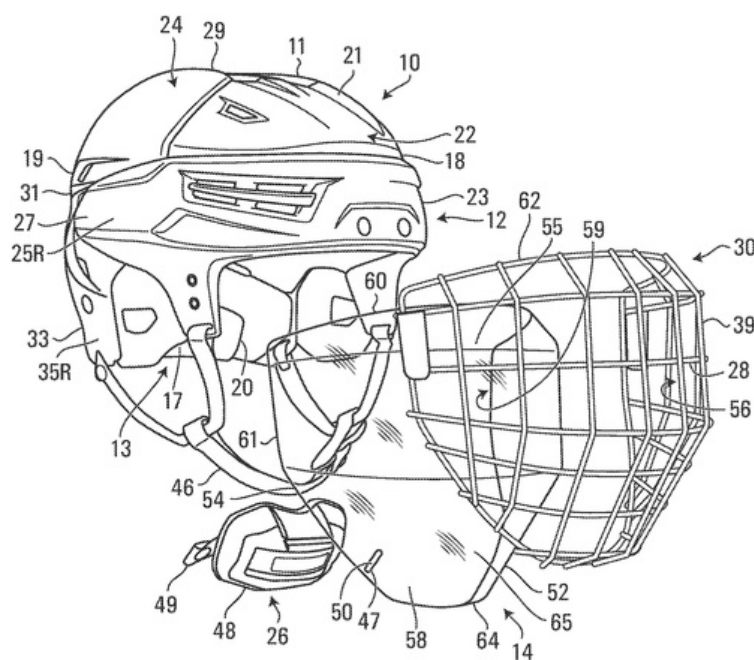
Date of publication: 2021-11-04

Applicant(s): BAUER HOCKEY

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Abstract

Protective headgear that is wearable on a head of a user and may be configured to provide impact protection and contaminant protection. The protective headgear may comprise a helmet configured to protect the user's head against impacts and a contaminant blocker configured to protect against contaminants (e.g., infectants), such as pathogens (e.g., viruses, bacteria, or other microorganisms) or other biohazards, chemical hazards, or other hazardous substances, transmittable to or from the user (e.g. as part of spatter, an aerosol, or other droplets). The helmet and the contaminant blocker may be configured to connect or otherwise interact with one another to be usable together. This may facilitate their use to enhance protection of the user and/or an environment of the user, while maintaining performance of the user, including by providing breathability, being spatter proof, ensuring proper vision, being antifogging, being customizable, and/or having other desirable attributes.



Method of resurfacing a sports court

Patent number: US20210180266

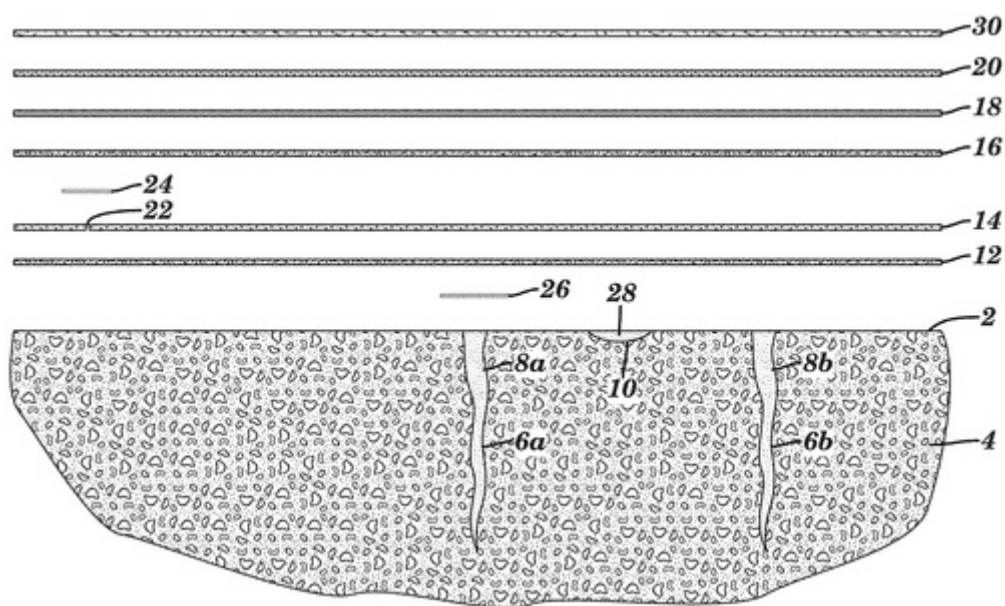
Date of publication: 2021-06-17

Applicant(s): C M SURFACES

Inventor(s): PALLENBERG CARVIN, BROGAN MARK

Abstract

Disclosed herein is a method of resurfacing a sports court. This method involves applying a first adhesive to an existing sports court; curing the first adhesive to a tacky state; applying a thin fabric onto the first adhesive, wherein the thin fabric has a first side applied to the first adhesive and a second side opposite the first side and wherein the thin fabric is capable of releasing from the tacky state of the first adhesive; applying a second adhesive to the second side of the fabric; applying an elastic mat on top of the second adhesive, wherein the elastic mat has a first side applied to the second adhesive and a second side opposite the first side; and applying a sealer to the second side of the elastic mat.



Bottom garment

Patent number: WO2021/153686

Date of publication: 2021-08-05

Applicant(s): ASAHI KASEI

Inventor(s): YADA KAZUYA, Otomo Haruka, SATAKE, Hisayo

Abstract

Provided is a bottom garment that does not inhibit ease of movement during action, and has a large pivot effect with respect to the knee. A bottom garment according to the present invention includes elastic yarn and is configured of a body fabric and an inner fabric, wherein the inner fabric is superposed on the inside of the body fabric, the bottom garment having a double structure in which at least a portion of the inner fabric is not bonded to the body fabric. The bottom garment is characterized in that $0.1 \leq A/B < 1.0$ is satisfied, where A is the stress upon 80% elongation in the vertical direction of a product of the inner fabric, and B is the stress upon 80% elongation in the horizontal direction of the product of the inner fabric.

Selected drawing: FIG. 1

		実施例1	実施例2	実施例3	実施例4	実施例5	実施例6	実施例7	実施例8	実施例9	実施例10	実施例11	実施例12
パターン		図1	図1	図1	図1	図1	図1	図1	図2	図2	図2	図2	図2
身生地	目付 [g/m ²]	243	243	243	174	174	174	174	243	243	174	174	174
	厚み [mm]	0.61	0.61	0.61	0.426	0.426	0.426	0.426	0.61	0.61	0.426	0.426	0.426
	ヨコ50%の応力 C [N]	2.3	2.3	2.3	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	伸長回復率 [%]	84	84	84	95	95	95	95	84	84	95	95	95
内生地	目付 [g/m ²]	243	94	230	230	140	202	281	243	230	230	140	281
	厚み [mm]	0.61	0.271	0.68	0.68	0.32	0.52	1.12	0.61	0.68	0.68	0.32	1.12
	ヨコ50%の応力 D [N]	4.5	5.0	12.1	12.1	20.9	6.0	3.4	4.5	12.1	12.1	20.9	3.4
	ヨコ80%の応力 B [N]	6.9	7.1	15.1	15.1	22.1	7.2	4.3	6.9	15.1	15.1	22.1	4.3
タテ80%の応力 A [N]	2.9	2.3	4.2	4.2	4.8	3.2	3.4	2.9	4.2	4.2	4.8	3.4	
伸長回復率 [%]	88	89	87	87	85	88	85	88	87	87	85	85	
応力比 内生地ヨコ/身生地ヨコ=D/C [-]	1.95	2.16	5.25	6.36	11.60	3.33	1.91	2.49	6.71	6.71	11.60	1.91	
応力比 内生地タテ/内生地ヨコ=A/B [-]	0.42	0.32	0.28	0.28	0.22	0.44	0.79	0.42	0.28	0.28	0.22	0.79	
内生地が身生地と接合していない面積割合 [%]	97	97	97	97	97	97	97	93	93	93	93	93	
身生地下方端部の身生地と非接合の割合 [%]	92	92	92	92	92	92	92	93	93	93	93	93	
内生地が臀部を覆う面積割合 [%]	48	48	48	48	48	48	48	9	9	9	9	9	
着圧	ヒップトップ [hPa]	14	18	20	22	24	17	18	10	12	15	14	16
	お腹 [hPa]	10	12	15	18	22	12	15	10	11	10	12	12
股関節トルク [Nm]	20	22	28	37	42	23	25	13	16	20	24	18	
膝角度 [deg.]	-7.2	-7	-8	-8.5	-10.2	-6.8	-6.8	6.6	7.4	8.4	9.3	6.4	
着用感	締め付け感 [-]	4.8	4.8	4.6	4.2	4	4.6	4.8	4.6	4.4	4	3.8	4.6
	動きやすさ [-]	4.8	4.6	4.4	4.4	4.2	4.6	4.4	4.6	4.6	4.4	4.2	4.2
	矯正感 [-]	4.6	4.6	4.6	4.8	4.8	4.6	4.6	4.4	4.6	4.6	4.8	4.2

Lightweight recyclable apparel with stretch properties

Patent number: US20210254244

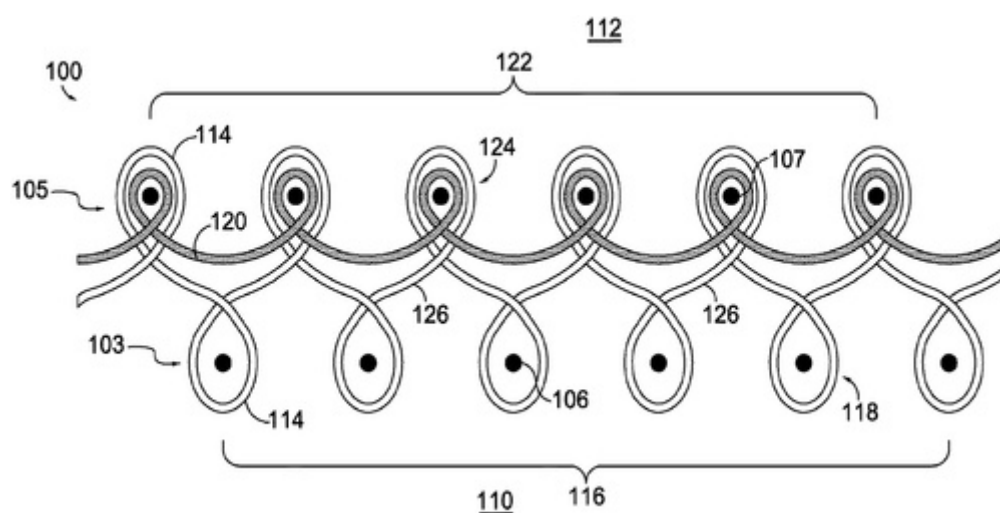
Date of publication: 2021-08-13

Applicant(s): NIKE, RUEY TAY FIBRE INDUSTRIAL

Inventor(s): LUI TAI, WU DEAN

Abstract

Aspects herein are directed to a lightweight, recyclable, double-knit textile used to form a recyclable, apparel item having stretch properties. The double-knit textile utilizes a combination of yarns, including a recyclable, elastic thermoplastic polyurethane (TPU) polymer yarn, in a knit construction where the technical face of the textile is formed from a non-elastic yarn such as a polyamide yarn, the technical back of the textile is formed the non-elastic yarn and the TPU polymer yarn in a plated relationship, and linking yarns that extend between the technical face and the technical back include the non-elastic yarn. The knit construction as described balances the need for opacity, optimal stretch features, support, and durability to an apparel item formed from the textile while still being lightweight.



Sports shoes and methods for manufacturing and recycling of sports shoes

Patent number: US20210195985

Date of publication: 2021-07-01

Applicant(s): ADIDAS

Inventor(s): KORMANN MARCO, HOLMES CHRISTOPHER EDWARD, HOYING BRIAN, BRUNDAGE ADAM MARTIN

Abstract

A sports shoe includes an upper wherein a majority by weight of the upper is made from a thermoplastic base material and a sole wherein a majority by weight of the sole is made from the same thermoplastic base material. The sole and the upper are individually fabricated and joined to each other. The thermoplastic base material includes at least one of the following materials: thermoplastic polyurethane TPU, polyamide PA, polyethylene terephthalate PET, or polybutylene terephthalate PBT.

