

## Title (en)

Protective garment against chemical and/or biological substances

## Title (de)

Bekleidungsstück zum Schutz gegen chemische und/oder biologische Substanzen

## Title (fr)

Vêtement de protection contre les substances chimiques et/ou biologiques

## Publication

**EP 1269877 A2 20030102 (DE)**

## Application

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## Priority

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## Abstract (en)

Protective clothing, has an outer fabric and an inner lining with a sliding clasp fastener and two flaps at the fastener half-sections with a protective coating. The protective clothing, has an outer fabric (5) and an inner lining (6), held together by at least one sliding clasp fastener (1) with two fastener half-sections (2, 3). Each sliding clasp fastener half-section (2, 3) has at least two flaps (4a, 4b). The outer flap (4a) is bonded to the outer fabric (5), and the inner flap (4b) is secured to the lining (6). At least one of the two flaps (4a, 4b) has a protective coating (7) which is impermeable to chemical and/or biological substances. The outer fabric (5) and/or the lining (6) are impermeable to chemical and/or biological substances. The inner flap (4b) has a protective coating (7), and the two flaps are welded together by the protective coating. The inner lining (6) is impermeable to chemical and/or biological substances, and the protective coating is integrated into the inner flap (4b), or is coated on its surface. The outer flap (4a) is a woven fabric, with a gas-tight coating (7). The protective coating (7) can be between the two flaps (4a, 4b), extending over the sliding clasp fastener (1). The protective coating (7) has a ribbon strip (8) at the inner sides of the outer flaps (4a) as a bonding with the coating (7) at the fastener half-sections (2, 3), which also bonds together the outer and inner flaps (4a, 4b) and the protective coating (7). The inner flap (4b) has a strip (11) to seal the stitched seam against penetration by chemical and/or biological substances. The protective coating (7) has a thickness of 0.2-0.4 mm and preferably 0.3 mm. Each inner flap (4b) takes up pull forces on the lining (6). The lining (6) is a laminated material, with a membrane (12) between two knitted layers which is impermeable to chemical and/or biological substances. The two flaps (4a, 4b) of the sliding clasp fastener half-sections (2,3) are in one piece, to give a U-shape, bonded to the half-sections (2,3) at the center zone. The two flaps (4a, 4b) can be from a common ribbon, which is divided into two flaps. An Independent claim is included for a sliding clasp fastener (1), where each fastener half-section (2, 3) has two flaps (4a, 4b) to be bonded to the outer fabric (5) and the inner lining (6). At least one flap (4a, 4b) carries a protective coating (7), which is impermeable to chemical and/or biological substances, which can extend over the fastener (1).

## Abstract (de)

Ein Bekleidungsstück zum Schutz gegen chemische und/ oder biologische Substanzen ist mit einer Oberware (5) und einer darunter angeordneten Futterware (6) und mit wenigstens einem Reißverschluß (1), der zwei beim Schließen ineinander greifende Reißverschlußhälften (2,3) aufweist, versehen. Jede Reißverschlußhälfte (2,3) ist mit wenigstens zwei Fahnen (4a,4b) versehen, wobei eine äußere Fahne (4a) mit der Oberware (5) und die andere, innere Fahne (4b) mit der Futterware (6) verbunden ist. Wenigstens eine der beiden Fahnen (4a,4b) ist mit einer Schutzschicht (7) versehen, die gegenüber chemischen und/oder biologischen Substanzen undurchlässig ist. Die Oberware (5) und/oder die Futterware (6) ist ebenfalls gegen chemische und/oder biologische Substanzen undurchlässig. <IMAGE>

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