



(43) International Publication Date
27 December 2013 (27.12.2013)

(51) International Patent Classification:
A44B 11/00 (2006.01)

(21) International Application Number:
PCT/IT2013/000164

(22) International Filing Date:
7 June 2013 (07.06.2013)

(25) Filing Language: Italian

(26) Publication Language: English

(30) Priority Data:
RM2012U000103 19 June 2012 (19.06.2012) IT

(72) Inventor; and

(71) Applicant : IANNACE, Sandro [IT/IT]; Via Vitaliano Rotellini, 101, I-00128 Roma (IT).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,

MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

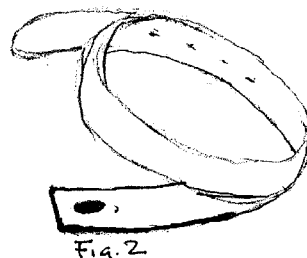
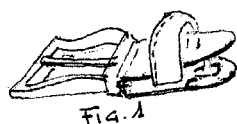
— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(54) Title: BELT WITH A FAST DETACHABLE BUCKLE HOLDER



(57) Abstract: The quick-release belt buckle for garments, allows people to be able to undergo the controls of the radiogenic equipment, placed in airports, seaports, museums, public and private offices, etc. without the belt to be removed and re threaded through the loops, eyelets and related items of clothing. These operations are uncomfortable, annoying, long, often made in precarious, complicated and uncomfortable situations. In addition, the release by the removal of the buckle (metal element) alone, simple and quick operation, significantly reduces the inspections time, uncomfortable slowdowns and therefore the queues, particularly at the security controls. In addition, being useful and practical, the novelty provides an impulse to the producing and commercial sector of the article.



DESCRIPTION

BELT WITH A FAST DETACHABLE BUCKLE HOLDER

The term "belt", also mentioned as "girdle", "waistband", etc., refers to the article of clothing that is worn around the waist with the purpose of supporting or just decorating the garments, such as trousers, shorts, skirts, jackets, coats, etc.

The belt is composed of two parts: the first one usually consists in a flexible strip made with material such as leather, skin, wool, cotton, etc.; the latter, placed at one end of the strip and joint with it, is the buckle which can be of various shapes and sizes and anyway almost all of the are metallic of stainless steel, brass, or other alloys. The buckle can be mounted on a strip, usually made of the same material as the belt, and attached to the latter with a seam, a screw, a rivet or any other way which makes it rigid and immovable, buckle keeper Fig. 1. Traditional belts are made in the way that the metal buckle can not be easily removed from the belt. The quick release buckle keeper proposed here allows in a few seconds, with a simple and easy operation, quick removal and the subsequent quick restoration of the belt's metal buckle ensuring a perfect hold. Although the buckle keeper is tightly and securely fixed to the belt, it can be easily and quickly unhooked in correspondence of the junction element Fig. 1 (2) and Fig 1 (3). This simple operation allows to release and remove all the metallic elements from the belt. At airports, harbors, museums, churches and public and private places of special interest, routine inspections, security checks aimed at metal objects search are executed; while carrying out these procedures, conventional belts are one of the main reasons of considerable waste of time. The quick-release belt buckle prevents the belt itself from having to be removed and rethreaded through the loops of the trousers, skirts etc., as it happens with the traditional belts, thus avoiding that the buckle's metallic part interferes with the equipment for the detection of metal objects (metal detector) anyway ensuring accurate, thorough and secure controls. These searches are performed routinely. Standard security checks to which passengers must undergo before boarding an aircraft, a ship, etc. As well as the visitors before entering a museum, a church, or in any other public or private place of particular interest must pass to the control points creating very often slowdowns and long waiting queues. The quick-release belt buckle, due to its use simplicity and quickness, facilitates the user from the uncomfortable and long maneuvers of removing and rethreading the belt to the loops of trousers, skirts etc., operations carried out in very uncomfortable contexts and causing time waste and very annoying situations, usually in precarious and stressful situations. Due to the ease of use, the hereby-mentioned belt also allows easy substitution of the buckle or the belt.

Moreover, being a useful novelty, it will surely have a positive impact on belt producing companies.

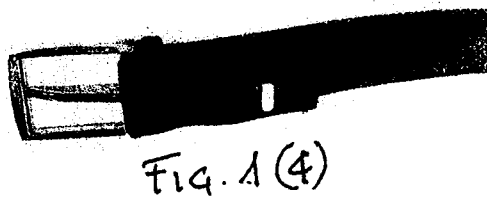
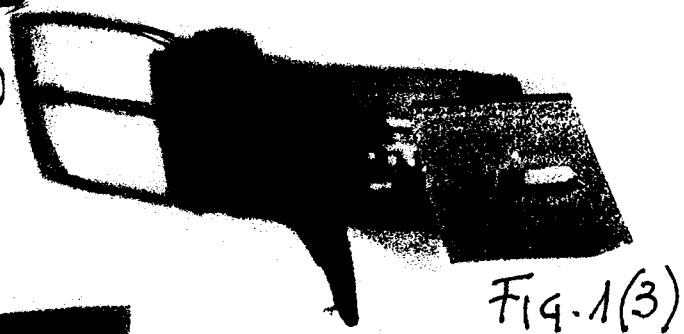
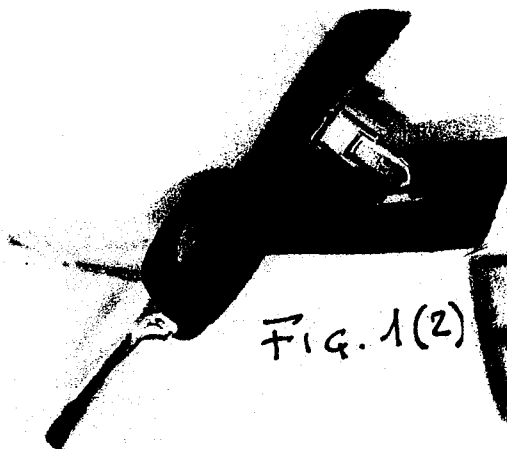
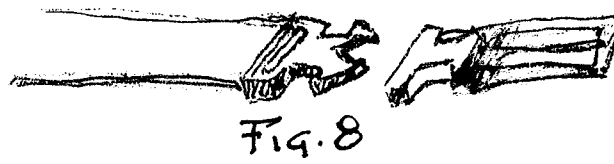
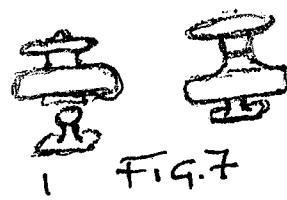
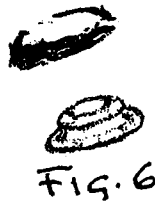
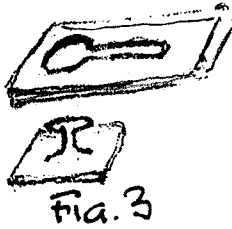
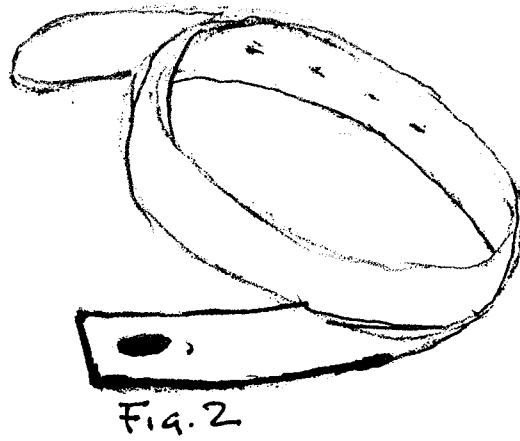
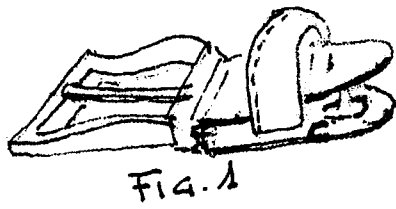
It is required the patent granting of utility model regarding the design, realization, assembly, production and sale of use and application of each type of element and/or systems such as cursor closing devices and mechanical equipment Fig. 3, with lever Fig 4, with swivel Fig.5, snap button Fig. 6, with snap security button Fig. 7, case-shaped Fig 8, on Velcro and analogues, as well as magnetic and/or electronic devices made of metallic, synthetic, composite, alloy and other materials, in order to create a belt which allows the quick removal and rejoining of the buckle or buckle keeper or its analogues using the elements, systems and devices, separate or combined, mentioned and listed above.

CLAIMS

1. The quick-release belt buckle is made by placing on the external flap of the "buckle keeper" a joint element Fig. 1 (2) which passing through the hole made in the belt Fig. 2 finds the abutment in the other flap of the buckle keeper Fig. 1 (3) fastening and joining them.
2. As stated in claim 1 the buckle keeper Fig.1 is equipped with a junction element, closure with lever (or hook) Fig. 4 placed on the external flap of the buckle keeper Fig. 1 (2), which going through the external hole made in the belt Fig. 2 and subsequently the abutment or hole made on the internal flap of the buckle keeper Fig. 1 (3) and lowering the lever allows the blocking keeping buckle keeper tightened to the belt Fig. 1 (4); at the same time with a very simple and quick opposite maneuver, lifting the lever or rotating the swivel and pulling the buckle keeper from the belt, the two items get disjoint.
3. As stated in claim 1 the buckle keeper is equipped with a junction element, closing with swivel Fig. 5, placed on the external flap of the buckle keeper Fig. 1 (2), which going through the hole in the belt Fig. 2 and subsequently through the matching hole made on the internal flap of the buckle keeper Fig. 1 (3) and rotating the swivel by 90° allows to block it, making the buckle keeper joint with the belt; at the same time with a very simple and fast maneuver contrary, rotating the swivel 90° and removing the buckle keeper from the belt, the two items get disjoint.
4. As stated in claim 1 the buckle keeper is equipped with a junction element, closure with automatic button Fig. 6 or automatic secure pressure button Fig. 7, consisting of two elements, one placed on the external flap of the buckle keeper which going through the hole in the belt, joins, exerting a pressure of the button, to another button element placed on the internal flap of the buckle keeper ensuring the blocking and making a buckle keeper united to the belt and at the same time with a simple and fast contrary maneuver, unhooking and removing the two elements of automatic button and slipping the buckle keeper from the belt, the two items get disjoint.
5. As stated in claim 1, the buckle keeper is equipped with a case-shaped junction closure element consisting of two elements one placed on the buckle keeper and the other one on the belt, made of plastic material or of ceramics or composed, which are joined by framing one to the other and ensuring the locking and

making a buckle keeper united to the belt and at the same time with a simple and fast contrary maneuver, unhooking and removing the two elements and slipping the buckle keeper from the belt, the two items get disjoint.

6. As stated in claim 1 the buckle keeper is provided with a junction closure element with the magnet or electronic magnet device consisting of two magnets one placed on the external flap of the buckle keeper which going through the hole in the belt joins another magnet on the external flap, coming close they join ensuring the ensuring the blocking and making a buckle keeper united to the belt and at the same time with a simple and fast contrary maneuver, unhooking and removing the two magnets and slipping the buckle keeper from the belt, the two items get disjoint.



INTERNATIONAL SEARCH REPORT

International application No
PCT/IT2013/000164

A. CLASSIFICATION OF SUBJECT MATTER
INV. A44B11/00
ADD.

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)
A44B A41F A45F

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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 159 857 A (MIX EDWIN S) 23 May 1939 (1939-05-23) claims 1-3; figure 3 -----	1,4
X	US 2010/235968 A1 (LEE GEORGE E [US] ET AL) 23 September 2010 (2010-09-23) paragraphs [0020], [0066]; figures 3,4 -----	1-6
X	WO 02/37997 A1 (MINELLA GILBERTO [IT]) 16 May 2002 (2002-05-16) abstract; claim 1; figures 1-4 -----	1-6
X	DE 76 15 272 U1 (BERKOWICZ) 21 October 1976 (1976-10-21) abstract; claim 1; figure 1 ----- -/-	1-6



Further documents are listed in the continuation of Box C.



See patent family 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 application or patent 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

8 October 2013

Date of mailing of the international search report

16/10/2013

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Monné, Eric

INTERNATIONAL SEARCH REPORT

International application No

PCT/IT2013/000164

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 20 2006 016965 U1 (HIRSCHMANN CHRISTOPHER [DE]; URBAN MIKE [DE]) 10 May 2007 (2007-05-10) abstract; figure 2 -----	1,5

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IT2013/000164

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2159857	A	23-05-1939	NONE
US 2010235968	A1	23-09-2010	US 2010235968 A1 23-09-2010 WO 2010107633 A1 23-09-2010
WO 0237997	A1	16-05-2002	AU 2251502 A 21-05-2002 IT VA20000019 U1 09-05-2002 WO 0237997 A1 16-05-2002
DE 7615272	U1	21-10-1976	NONE
DE 202006016965	U1	10-05-2007	NONE