

Title (en)

AN AUTOMATIC MAGNETIC BUCKLE AND ITS USE METHOD

Title (de)

AUTOMATISCHE MAGNETISCHE SCHNALLE UND DEREN VERWENDUNGSVERFAHREN

Title (fr)

BOUCLE MAGNÉTIQUE AUTOMATIQUE ET SON PROCÉDÉ D'UTILISATION

Publication

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Application

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Priority

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Abstract (en)

The present invention discloses an automatic magnetic buckle, which comprises a matching clamping head (1) and a buckle base (2). The said clamping head (1) comprises a clamping head housing, and the said clamping head housing has a cavity extending through the upper and lower ends of the clamping head housing. The said cavity is set with a buckle subassembly, the said buckle base (2) is set with a buckle head (21) matching with the said buckle subassembly, and the said clamping head (1) and the buckle base (2) are set with magnetic subassemblies which are mutually attracted. Clamping head (1) and buckle base (2) are attracted together through the matching of the magnetic subassembly. The buckle subassembly is matched with the buckle head (21) to securely connect the clamping head (1) and the buckle base (2). The present invention also discloses a method of using the automatic magnetic buckle. The fixed connection between the buckle base (2) and the clamping head (1) can be easily realized by the action of the magnetic subassembly, and the connection is stable and firm. The buckle base (2) and the clamping head (1) can be conveniently separated by the design of the fastener unfolding device.

IPC 8 full level

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Citation (search report)

- [X] GB 2511104 A 20140827 - MAGLOC IP LTD [GB]
- [X] US 2013185901 A1 20130725 - HEYMAN FREDRICK S [US], et al
- [X] CN 107448445 A 20171208 - DONGGUAN YONGCHENG EXERCISE APPLIANCE LTD
- [X] DE 202018101841 U1 20180427 - GLOZBACH DE CABARRUS JEROME [DE], et al
- [X] CN 203570760 U 20140430 - WANG GUISHENG

Cited by

CN114763804A; US11350705B2; US11925241B2; WO2022152418A1; US11712090B2; US12053062B2; US10874178B2; US11266208B2; US11758987B2; US11758988B2; US11903455B2

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