

Title (en)
MECHANICAL-MAGNETIC CONNECTING STRUCTURE

Title (de)
MECHANISCH-MAGNETISCHE VERBINDUNGSKONSTRUKTION

Title (fr)
CONSTRUCTION D'ASSEMBLAGE MÉCANIQUE-MAGNÉTIQUE

Publication
EP 2271233 A2 20110112 (DE)

Application
EP 09733323 A 20090415

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Abstract (en)
[origin: WO2009127196A2] The invention relates to a mechanical-magnetic connecting structure, which is to say a mechanical lock that closes supported by magnetic force. The connecting structure comprises a module A and a module B, which each are part of the objects to be coupled or are attached to the objects to be coupled, wherein the connecting structure has the following characteristics: The modules A and B are configured as a magnetic system such that as the modules approach each other they are aligned by means of magnetic force in predetermined spatial positions and attracted to each other, whereby two engagement sections are operatively connected and locked with each other. According to the invention, the engagement sections have a helical configuration. Module A and module B, without rotation, are closed such that the helical engagement section positively snaps into the helical engagement section by means of the magnetic attraction. Module A and module B are to be opened such that upon rotation of the modules and the attendant rotation of the magnets from the closed position into the open position the helical engagement sections are turned to disengage.

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Citation (search report)
See references of WO 2009127196A2

Cited by
WO2020058262A1; EP4014782A1; EP4023095A1; US11425968B2; US11641912B2

Designated contracting state (EPC)
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