

Title (en)
SKI BINDING WITH PYROTECHNIC FASTENER RELEASE

Title (de)
SKIBINDUNG MIT PYROTECHNISCHEM AUSLÖSER

Title (fr)
FIXATION DE SKI À DÉTACHEMENT D'ÉLÉMENT DE FIXATION PYROTECHNIQUE

Publication
EP 4188564 A4 20240501 (EN)

Application
EP 20946668 A 20200728

Priority
US 2020043822 W 20200728

Abstract (en)
[origin: WO2022025863A1] A ski binding release system includes a spring that is releasably maintained in a first state using a pyrotechnic fastener. In the first state, a ski boot is secured in the ski binding. The pyrotechnic fastener is electrically coupled to an activation circuit. The activation circuit includes a battery, a plurality of sensors, a switch, and a controller. When the controller determines that the skier has fallen, the controller generates an output signal that transitions the switch from a disconnected state to a connected state. In the disconnected state, the pyrotechnic fastener is electrically disconnected from the battery. In the connected state, the pyrotechnic fastener is electrically connected to the battery. Electrical energy from the battery causes the pyrotechnical fastener to explode to transition the spring from the first state to a second state to release the ski boot from the ski binding.

IPC 8 full level
A63C 9/08 (2012.01); **A43B 5/04** (2006.01); **A43B 19/00** (2006.01); **A63C 9/084** (2012.01); **A63C 9/085** (2012.01); **A63C 9/088** (2012.01)

CPC (source: EP)
A43B 5/0417 (2013.01); **A43B 5/0421** (2013.01); **A43B 19/00** (2013.01); **A63C 9/0802** (2013.01); **A63C 9/0842** (2013.01); **A63C 9/08521** (2013.01); **A63C 9/088** (2013.01); **A63C 2203/12** (2013.01); **A63C 2203/18** (2013.01); **A63C 2203/24** (2013.01)

Citation (search report)
• [XAY] FR 2348719 A1 19771118 - RUGGIERI ETS [FR]
• [Y] DE 102007001599 B4 20091217 - DENZ HEINZ [DE]
• See also references of WO 2022025863A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2022025863 A1 20220203; CA 3184714 A1 20220203; CN 116234470 A 20230606; EP 4188564 A1 20230607; EP 4188564 A4 20240501

DOCDB simple family (application)
US 2020043822 W 20200728; CA 3184714 A 20200728; CN 202080104878 A 20200728; EP 20946668 A 20200728