

Title (en)

AN ELECTRICAL ACTIVE UNIT FOR GENERATING A PHYSICAL EFFECT, TEXTILE ELEMENT INCLUDING THE SAME AND METHOD FOR FABRICATING SAID ELECTRICAL ACTIVE UNIT

Title (de)

ELEKTRISCHE AKTIVE EINHEIT ZUR ERZEUGUNG EINES PHYSISCHEN EFFEKTES, TEXTILELEMENT DAMIT UND VERFAHREN ZUR HERSTELLUNG DER ELEKTRISCHEN AKTIVEN EINHEIT

Title (fr)

UNITÉ ACTIVE ÉLECTRIQUE POUR GÉNÉRER UN EFFET PHYSIQUE, ÉLÉMENT TEXTILE LA COMPRENANT ET PROCÉDÉ DE FABRICATION DE LADITE UNITÉ ACTIVE ÉLECTRIQUE

Publication

EP 3654792 A4 20210428 (EN)

Application

EP 17910776 A 20170525

Priority

CN 2017085830 W 20170525

Abstract (en)

[origin: WO2018214088A1] An electrical active unit (100) for generating a physical effect such as heat, cold or light emission, with a particular application to a temperature regulation system for regulating the temperature of a body, or to a light emission system to be worn by such a portion of a body. The electrical active unit (100) comprises a textile support (102) supporting: an active element (101) adapted for generating said physical effect; at least one electrical connection point (104) adapted to be connected to a power source and a controlling unit, and located on said active element (101); a sensor (106) adapted for being connected to the power source and the controlling unit, such that the electrical active unit may be connected to the power source and the controlling unit via the connection point in order to allow the powering of the active element by the power source and the activation/deactivation of said active element by the controlling unit depending on data sensed by the sensor. The textile support (102) has a first face and a second face opposite to said first face, the at least one connection point (104) being located solely on the first face, the active element (101) being embedded in the textile support (102) so as to form a determined pattern on the first and second faces. The pattern can avoid electrical current discharged from the connection points (104) through the second face, thereby avoiding direct contact between the skin and hot spots located at connection points (104).

IPC 8 full level

A41D 13/005 (2006.01); **A61F 7/00** (2006.01)

CPC (source: EP US)

A41D 1/005 (2013.01 - EP); **A41D 13/005** (2013.01 - EP); **A41D 13/0051** (2013.01 - EP US); **A41D 13/0053** (2013.01 - EP US); **A41D 13/01** (2013.01 - EP US); **A61F 7/007** (2013.01 - EP); **H05B 3/342** (2013.01 - US); **A61F 2007/0093** (2013.01 - EP); **A61F 2007/0095** (2013.01 - EP); **A61F 2007/0098** (2013.01 - EP); **A61F 2007/0233** (2013.01 - EP); **A61F 2007/0244** (2013.01 - EP); **H05B 3/345** (2013.01 - US); **H05B 2203/015** (2013.01 - US); **H05B 2203/035** (2013.01 - US); **H05B 2203/036** (2013.01 - US)

Citation (search report)

- [XII] US 2015083705 A1 20150326 - CRONN CHARLES E [US], et al
- [XII] WO 2016007543 A1 20160114 - DESEVE GERMAIN [US]
- [XII] US 2008223844 A1 20080918 - CRONN CHARLES E [US]
- [XII] US 2004256381 A1 20041223 - HAAS WILLIAM S [US], et al
- See references of WO 2018214088A1

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 2018214088 A1 20181129; CN 110769709 A 20200207; EP 3654792 A1 20200527; EP 3654792 A4 20210428; US 2020170314 A1 20200604

DOCDB simple family (application)

CN 2017085830 W 20170525; CN 201780091142 A 20170525; EP 17910776 A 20170525; US 201716616463 A 20170525