



Abstract of the Disclosure

A device and a process for charging of rechargeable NiCd, Ni-metal hydride or lithium batteries (12) of implants by transcutaneous transmission of electric power from an external power transmission part (11) to a power receiving part (10) which forms a part of the implant.

5 The charging device is provided with a charging current detector (27, 32, 34) which, in a first charging phase (T1), allows a relatively high charging current ( $I_L$ ) to flow and which, after the cell voltage ( $U_Z$ ) of the battery has reached a predetermined limiting charging voltage ( $U_G$ ), in a second charging phase (T2), reduces the charging current as compared to the charging current which flows at the end of the first charging phase. The charging current detector is made such

) that, during the second charging phase, it sets the charging current to a value causing the cell voltage during the second charging phase to be kept at least approximately at a predetermined constant voltage value ( $U_G$ ).































