

Title (en)
CAPACITIVE SWITCH ASSEMBLY

Title (de)
KAPAZITIVE SCHALTERANORDNUNG

Title (fr)
ENSEMBLE COMMUTATEUR CAPACITIF

Publication
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Application
EP 21711396 A 20210122

Priority
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Abstract (en)
[origin: WO2021150130A1] The present invention relates to a switch assembly (1) comprising a housing (2), an activation button (3) slidable along an activation axis (A), and a variable capacitor (4) defining a capacitive switch having an off position and at least one on position. In order to simply predefine a haptic response of said switch assembly (1), as well as variation of capacitance of said variable capacitor (4) in a function of a displacement of said activation button (3), said variable capacitor (4) comprises a resilient activation member (41) with a closed cross-section (S) supported on at least two support points (P1, P2) and on an activation point (P3), wherein said support points (P1, P2) are located on the opposite sides of the activation axis (A) and on one side of the longest, perpendicular to the activation axis (A) chord (C) of said cross-section (S), define a support section (B) located at least partially inside said cross-section (S), and are defined by at least one support member (42), while said activation point (P3) is located substantially on the activation axis (A); a first conductive layer (44) located on the activation member (41); and a second conductive layer (45) located in said off position at a non-zero distance (L1) from the first conductive layer (44); wherein the approach of said activation point (P3) to said support points (P1, P2) along the activation axis causes bilateral centripetal compression of the activation member (41) along the activation axis (A) and centrifugal stretching of the activation member (41) in a direction substantially perpendicular to the activation axis (A) and displacement of said first conductive layer (44) relative to the second conductive layer (45) of the variable capacitor (4)..

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Citation (search report)
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