Title (en)

CONTROL STRUCTURE WITH ROTARY FORCE LIMITER AND ENERGY DISSIPATER

Title (de)

STEUERUNGSSTRUKTUR MIT DREHKRAFTBEGRENZER UND ENERGIEABLEITER

Title (fr)

STRUCTURE DE COMMANDE AVEC LIMITEUR DE FORCE DE ROTATION ET DISSIPATEUR D'ÉNERGIE

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Application

EP 19849668 A 20190816

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Abstract (en)

[origin: WO2020035822A1] A control structure comprising a pivotably based rocker frame assembly integral with rotary yield units able to produce a constant resistive yield force through high elasto-plastic displacements and high ductilities. Located within and distributed about the rotary yield units are flexural yield plates with particular boundary conditions enabling them to elasto-plastically flex to high cycling elasto-plastic displacements and high displacement and curvature ductilities, while maintaining a constant resistive yield force. The constant resistive yield force produced by the replaceable rotary units enables the control structure to resist and endure extreme seismic events (base motion input) with a constant resistive yield force, while plastic curvatures within the yield zones of the flexural plates of the rotary units are maintained well within their capacity; and forces within the control structure, within its supporting foundations, and within masses or other structures it is seismically supportive of are controlled and limited.

IPC 8 full level

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CPC (source: AU EP US)

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