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(54) Title: INTERVERTEBRAL DISC REPLACEMENT

(57) Abstract: An intervertebral disc replacement has two members attached to vertebral body endplates of two adjacent vertebrae. The two members are formed with respective articulation surfaces which form at least part of an articulation arrangement. When loaded with compressive axial force, the articulation arrangement supports the vertebral contact surfaces against the compressive force to ensure a predefined minimum intervertebral spacing, and allows a range of turning motion in all directions. The articulation arrangement is formed to provide an increase in the intervertebral spacing as a smooth function of angular displacement from a neutral position over at least part of the range of motion in each direction for each direction of motion, thereby providing motion attenuation and restoring forces.



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