

Title (en)

DRIVE MECHANISM AND ROTARY DISPLACER FOR HOT AIR ENGINES

Title (de)

GETRIEBE UND ROTIERENDER VERDRÄNGER FÜR HEISSLUFTMASCHINEN

Title (fr)

MECANISME D'ENTRAINEMENT ET DEPLACEUR ROTATIF POUR MOTEURS A AIR CHAUD

Publication

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Application

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Abstract (en)

[origin: WO0068545A1] A drive mechanism (20) for use in the transmission of power from a plurality of linear reciprocating power generating elements (14) to a rotating output element (60). The drive mechanism (20) includes a drive cam member (21) having a cam follower guiding contour (30) extending along the cam member (21); a drive cam follower (31) operatively connected to each power generating element (14). Each follower (31) is adapted to engage the cam follower guiding contour (30) throughout each reciprocation cycle of the power generating elements (14), the drive cam follower guiding contour (30) following a generally sinusoidal profile on the surface of the drive cam member (21), the profile including a series of lobes (25, 26) forming peaks and troughs with intermediate regions (27, 28) therebetween, the peak to peak amplitude of the substantially sinusoidal profile of the cam follower guiding contour (30) on the surface of the drive cam (21) substantially corresponding to the stroke amplitude of the stroke of the reciprocating power generating elements (14). There are at least three drive cam followers (31) spaced along the contour (30) from one peak to an adjacent trough. A rotary vane displacer for a gamma form Stirling engine is also described.

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