

Title (en)  
A HIGHLY ELLIPTICAL ORBIT FOR COMMUNICATIONS SATELLITES

Title (de)  
STARK ELLIPTISCHER ORBIT FÜR KOMMUNIKATIONSSATELLITEN

Title (fr)  
ORBITE FORTEMENT ELLIPTIQUE POUR SATELLITES DE COMMUNICATION

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Application  
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Abstract (en)  
[origin: WO03061141A2] An optimized orbit for a communications satellite may include a highly elliptical orbit ("HEO") with optimized inclination. In one embodiment, the HEO orbit may be a lower inclination variation of a tundra orbit having a teardrop shaped ground track and an inclination approximately between 53 degrees and 56 degrees. The communications satellite following the lower inclination HEO orbit may be a part of a satellite constellation. The satellite constellation may include a three-satellite or a six-satellite constellation. In one embodiment, the satellite constellation may be initially implemented as a three-satellite constellation, and three more satellites may be launched later to form a six-satellite constellation.

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