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Lemke et al.

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(54) **TWO-CYCLE, OPPOSED-PISTON INTERNAL COMBUSTION ENGINE**

(56) **References Cited**

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(*) Notice: Subject to any disclaimer, the term of this
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(57) **ABSTRACT**

In a two-cycle, opposed-piston internal combustion engine,
opposed pistons disposed in a cylinder are coupled to a pair of
side-mounted crankshafts by connecting rods that are subject
to substantially tensile forces acting between the pistons and
the crankshafts. This geometry reduces or eliminates side
forces between the pistons and the bore of the cylinder. The
cylinder and the pistons are independently cooled to reduce
cylindrical deformation caused by thermal expansion during
engine operation.

21 Claims, 41 Drawing Sheets

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(65) **Prior Publication Data**

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Related U.S. Application Data

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2005, now Pat. No. 7,549,401, which is a
continuation-in-part of application No. 10/865,707,
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See application file for complete search history.

