



(12) **United States Patent**
Wagner et al.

(10) **Patent No.:** **US 10,156,202 B2**
(45) **Date of Patent:** **Dec. 18, 2018**

- (54) **BARRIER RING AND ASSEMBLY FOR A CYLINDER OF AN OPPOSED-PISTON ENGINE**
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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 514 days.

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- (21) Appl. No.: **15/060,933**
- (22) Filed: **Mar. 4, 2016**

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- (65) **Prior Publication Data**
- US 2017/0254288 A1 Sep. 7, 2017
- (51) **Int. Cl.**
- F02F 1/22** (2006.01)
- F02F 1/24** (2006.01)
- (Continued)
- (52) **U.S. Cl.**
- CPC **F02F 1/24** (2013.01); **F02B 75/282** (2013.01); **F02B 77/04** (2013.01); **F02F 1/22** (2013.01);
- (Continued)
- (58) **Field of Classification Search**
- CPC F02F 1/24; F02F 2001/249; F02F 7/0009; F02F 1/22; F02B 75/282; F02B 75/28; F02B 77/04; F02B 25/08
- See application file for complete search history.

(57) **ABSTRACT**

A barrier ring for a cylinder assembly for an opposed-piston engine fits into a groove fashioned into a portion of the cylinder liner that is adjacent to the top dead center location of the end surfaces of the pistons, in a volume of the cylinder liner that defines the combustion chamber. The barrier ring and groove are part of a barrier assembly that prevents heat generated during combustion from reaching the outer wall of the cylinder assembly, reducing the need for conventional cooling systems and increasing the amount of heat retained in the combustion chamber. The barrier assembly allows for increased engine efficiency because of the combustion heat retained in the combustion chamber, as well as a reduction in the overall size of the engine because of the reduction in engine cooling needed.

21 Claims, 10 Drawing Sheets

