

Title (en)

LONGEVITY AND PERFORMANCE IMPROVEMENTS TO FLARE TIPS

Title (de)

ANGLEBIGKEITS- UND LEISTUNGSVERBESSERUNGEN BEI FACKELSPITZEN

Title (fr)

AMELIORATION DE LA LONGEVITE ET DE LA PERFORMANCE DE NEZ DE TORCHE

Publication

**EP 1979677 A1 20081015 (EN)**

Application

**EP 07704896 A 20070112**

Priority

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Abstract (en)

[origin: WO2007085793A1] Low emissivity (low-E) coatings are applied onto surfaces of flare tips to achieve longer flare tip service life, improved flare tip structural integrity and/or a more stable flame pattern under a wide range of operating conditions. In accordance with some embodiments of the present invention, low-E coatings may be applied to the flare tip burner as well as associated internal and/or external component surfaces to reduce direct flame radiation and also conductive heat transfer. The low-E coating material preferably has an emissivity of less than about 0.80, more preferably between about 0.20 to about 0.78. The coating thickness of the low-E material is preferably between about 1 mil to about 25 mils, and more preferably between about 2 mils to about 8 mils. Coating densities of the low- E material in the coating will preferably be at least about 65%, more preferably between about 80% to about 100%.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2007085793A1

Cited by

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EP 1979677 B1 20121010; ES 2396997 T3 20130301; JP 2009524795 A 20090702; JP 5066103 B2 20121107; KR 20080098383 A 20081107;  
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