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(54) **Title:** THERMAL BARRIER COATINGS AND PROCESSES

Fig. 1A

Top Coat 11
Substrate 10

Fig. 1B

Top Coat 11
Bond coat 12
Substrate 10

Fig. 1C

Top Coat 11
Intermediate Layer 13
Bond coat 12
Substrate 10

(57) **Abstract:** Articles coated with a porous, segmented thermal barrier coating. The coating described has a density less than about 88% of the theoretical density. Multi-layer articles and methods of applying the thermal barrier coatings to an article are also described.



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