

ABSTRACT OF THE DISCLOSURE

Flame Straightening in a Furnace

The present invention relates to a method and furnace for generating straightened flames in a steam methane reformer or ethylene cracking furnace where fuel-staged
5 burners are used. Fuel staging may be used for reducing NO_x emissions. Criteria for generating straightened flames are provided. These criteria relate to oxidant conduit geometry and furnace geometry. Techniques for modifying the furnace and/or burners to achieve these criteria are also provided.

10 Fig.1