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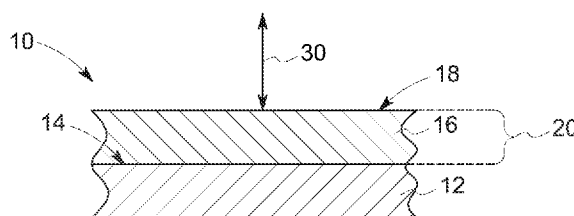


FIG. 1

(57) **Abstract:** Methods for repairing flange bolt holes and the resulting flange bolt holes are provided. The methods and products include the incorporation of a coating system comprising a corrosion resistant layer, which can be formed by resistance plug welding, slurry or sol-gel processing, or thermal/cold spray processing. The corrosion resistant layer can be a super alloy or ceramic material and is different than the base material of the flange bolt hole. Corrosion of the flange bolt hole can be reduced or prevented from occurring with the use of the coating system.



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