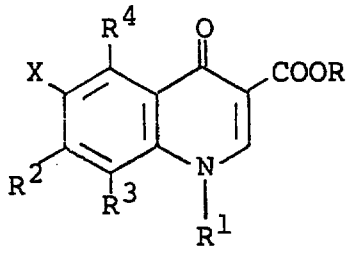
THIS SHEET HAS BEEN REPLACED

Abstract of the Disclosure:

BENZOHETEROCYCLIC COMPOUNDSE

Novel 4-oxoquinoline-3-carboxylic acid compounds of the formula:



[1]

wherein R^1 is cyclopropyl which may have 1 to 3 substituents of alkyl and halogen; phenyl which may be substituted by 1 to 3 substituents of alkoxy, halogen and OH; alkyl which may be substituted by halogen, alkanoyloxy or OH; alkenyl; or thienyl, R^2 is 5- to 9-membered saturated or unsaturated heterocyclic ring which may be sustituted, R^3 is H, alkyl or halogen, R^4 is alkyl or halogen, R is H or alkyl, R^1 and R^3 may be taken together to form $-\underset{\underset{R^{31}}{|}}{CH}-CH_2-O-$ wherein R^{31} is H or alkyl, and X is halogen, provided that R^3 and R^4 are not simultaneously halogen, and that when R^3 is H, R^4 is alkyl, and salts thereof, said compounds having excellent antimicrobial activity and hence being useful as an antimicrobial agent, and a pharmaceutical composition containing said compound as an active ingredient.

This Sheet Has Been Replaced

