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(19) **United States**(12) **Patent Application Publication**
Moravcova et al.(10) **Pub. No.: US 2005/0080097 A1**(43) **Pub. Date: Apr. 14, 2005**(54) **PYRAZOLO[4,3-D]PYRIMIDINES,
PROCESSES FOR THEIR PREPARATION
AND METHODS FOR THERAPY**(57) **ABSTRACT**

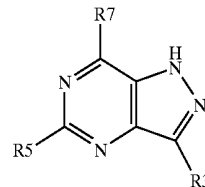
The invention relates to 3-, 5-, 7-trisubstituted pyrazolo[4,3-d]pyrimidines represented by the general formula I

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Republic)**(21) Appl. No.: **10/952,087**(22) Filed: **Sep. 28, 2004****Related U.S. Application Data**(63) Continuation of application No. PCT/EP03/03207,
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and pharmaceutically acceptable salts thereof, wherein

R3 is an optionally substituted alkyl, cycloalkyl, cycloheteroalkyl, cycloalkyl alkyl, aryl or alkylaryl group;

R5 is halogen, —NHNH₂, —NHOH, NHCONH₂, guanlylo (NH—C(NH)NH₂) an optionally substituted C₁-C₆ alkyl, alkenyl, alkynyl, C₃-C₁₅ cycloalkyl, R_f (C₃-C₁₅ cycloalkyl), heterocycle, heteroalkyl, aryl, heteroaryl, arylalkyl, cycloheteroalkyl, cycloheteroalkyl alkyl, heteroarylalkyl group, the group —C(O)—R_a, —C(O)NR_bR_c, —SO₃R_d, or —NH—C(O)R_e, wherein R_a and R_f are an optionally substituted C₁-C₆ alkyl, alkenyl, or alkynyl group, R_b, R_c and R_d are independently selected from the group consisting of H, optionally substituted C₁-C₆ alkyl, alkenyl, or alkynyl group, and R_e is a hydroxy, amino, alkoxy, alkylamino, optionally substituted C₁-C₆ alkyl, alkenyl or alkynyl group; or the group —X—R₅, wherein X is —NH—, —O—, —S— or —N(alkyl)— and R₅ is hydrogen, an optionally substituted C₁-C₆ alkyl, alkenyl, alkynyl, C₃-C₁₅ cycloalkyl, R_f (C₃-C₁₅ cycloalkyl), aryl, heterocycle, hetero C₁-C₆ alkyl, arylalkyl, heteroaryl, cycloheteroalkyl, cycloheteroalkyl alkyl, or heteroarylalkyl group, the group —C(O)—R_a, —C(O)NR_bR_c, —SO₃R_d, or —NHC(O)R_e, wherein R_a, R_b, R_c, R_d, R_e and R_f have the above meaning, and

R7 is halogen, —NHNH₂, NHOH, NHCONH₂, guanlylo (NH—C(NH)NH₂) or the group —X—R₇, wherein X has the above meaning and the meaning of R₇ is as defined for R₅.

