(1) Publication number:

0 154 220

A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 85101565.1

(22) Date of filing: 13.02.85

(51) Int. Cl.4: **C 07 D 471/04** A 61 K 31/435

//C07D231/38, (C07D471/04,

231:00, 221:00)

(30) Priority: 22.02.84 GB 8404586

(43) Date of publication of application: 11.09.85 Bulletin 85/37

88) Date of deferred publication of search report: 16.07.86

(84) Designated Contracting States: BE CH DE FR GB IT LI NL SE (1) Applicant: BEECHAM GROUP PLC Beecham House Great West Road Brentford Middlesex TW8 9BD(GB)

72 Inventor: Ward, Robert William 175 Jocelyns

Old Harlow Essex(GB)

(72) Inventor: Hughes, Ian 37 Church Walk Sawbridgeworth Hertfordshire(GB)

(24) Representative: Jones, Pauline et al,
Beecham Pharmaceuticals Patents & Trade Marks Dept.
Great Burgh Yew Tree Bottom Road
Epsom Surrey KT18 5XQ(GB)

54 Pyrazolopyridine derivatives.

(5) Compounds of formula (I) and pharmaceutically acceptable salts thereof:

$$\begin{array}{c|c}
R_1 & 6 & N^1 \\
\hline
 & & & \\
R_2 & & & \\
\end{array}$$

$$\begin{array}{c}
XR_3 \\
N^1 \\
N^2
\end{array}$$

$$\begin{array}{c}
R_4 \\
\end{array}$$

$$\begin{array}{c}
(1)
\end{array}$$

wherein:

X is NR wherein R is hydrogen or C_{1-6} alkyl, oxygen, sulphur, SO or SO₂;

 R_1 is COR_5 wherein R_5 is hydroxy, or COR_5 is a pharmaceutically acceptable ester or amide group; or CF_3 ; and R_2 is hydrogen C_{1-6} alkyl or phenyl optionally substituted by halogen, CF_3 , C_{1-4} alkoxy or C_{1-4} alkyl; or R_2 is COR_5 as defined or CF_3 and R_1 is hydrogen;

 R_3 is C_{1-10} alkyl, optionally substituted by hydroxy, C_{1-4} alkoxy, thiol, C_{1-4} alkylthio or NR_6R_7 herein R_6 and R_7 are independently hydrogen or C_{1-6} alkyl or together are C_{3-6} polymethlene; C_{2-10} alkenyl or phenyl optionally substituted by one or two of halogen, CF_3 , C_{1-4} alkoxy, C_{1-4} alkyl, hydroxy, nitro, cyano, C_{2-10} acyloxy, NR_8R_9 wherein R_8 and R_9 are independently selected from hydrogen,

 C_{1-6} alkyl, C_{2-7} alkanoyl or C_{1-6} alkylsulphonyl or COR_{10} wherein R_{10} is hydroxy, C_{1-6} alkoxy or $NR_{11}R_{12}$ wherein R_{11} and R_{12} are independently selected from hydrogen or C_{1-6} alkyl; and

R₄ is hydrogen; or C₁₋₄ alkyl or benzyl attached at nitrogen atom 1 or 2 having anti-inflammatory and/or anti-allergy activity, a process for their preparation and their use as pharmaceuticals.





EUROPEAN SEARCH REPORT

EP 85 10 1565

Citation of document with indication, where appropriate,				
Category		vant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Ci 4)
x	JOURNAL OF THE CHEMICAL SOCIETY, PERKIN TRANSACTIONS I, 1976, pages 507-512, London, GB; H.E. FOSTER et al.: "Pyrazolopyridines. Part IV. Preparation and tautomerism of 6-cyano- and 6-ethoxycarbonyl-1,4-dihydropyraz olo[4,3-b]pyridin-7-ones" * Page 511, column 2, lines 52-62		1	C 07 D 471/04 A 61 K 31/435 C 07 D 231/38 (C 07 D 471/04 C 07 D 231:00 C 07 D 221:00
х	CHEMICAL ABSTRACTION OF THE CHEMICAL ABSTRACTION OF T	no. 168030e, US; & JP - A - O YAKUHIN KOGYO	1,9	
	. No der oor me da			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
				C 07 D 471/00 A 61 K 31/00
ż	·			
	The present search report has t	een drawn up for all claims		
	Place of search THE HAGUE	Date of completion of the search 10-04-1986	ALFAR	Examiner RO I.
Y:pa do A:ted O:no	CATEGORY OF CITED DOCU rticularly relevant if taken alone rticularly relevant if combined w cument of the same category chnological background in-written disclosure ermediate document	E : earlier pat after the fi ith another D : document L : document	ent document, ling date cited in the appointed for other fathersame pate	ying the invention but published on, or plication reasons nt family, corresponding