

[54] **SUBSTITUTED
4-AZATRICYCLO(22.3.1.0^{4,9})OCTACOS-
18-ENE DERIVATIVES, THEIR
PREPARATION AND PHARMACEUTICAL
COMPOSITIONS CONTAINING THEM**

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[22] Filed: Aug. 25, 1989

[30] **Foreign Application Priority Data**

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May 31, 1989 [GB] United Kingdom 8912432

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C12P 17/18

[52] U.S. Cl. 514/291; 514/411;
540/456; 435/898; 435/886; 435/118

[58] Field of Search 540/456; 514/63, 183,
514/291, 411; 435/598, 886, 118

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,894,366 1/1990 Okuhara et al. 540/456

OTHER PUBLICATIONS

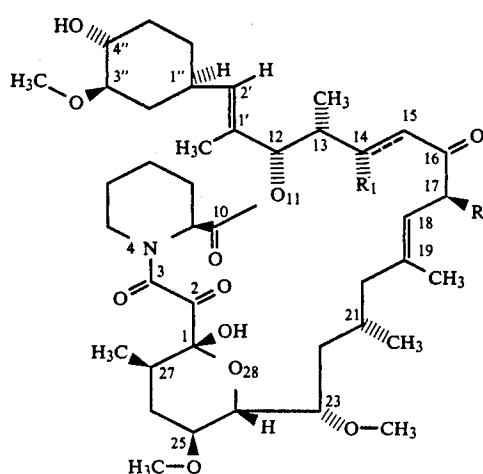
Jones et al., "J. Am. Chem. Soc." (1989), vol. III, pp.
1157-1159.

Primary Examiner—Robert T. Bond

Attorney, Agent, or Firm—Gerald D. Sharkin; Robert S.
Honor; Thomas O. McGovern

[57] **ABSTRACT**

The compounds of formula I



wherein

either

R₁ is hydroxy,

R₂ is allyl or n-propyl and

there is a single bond between the carbon atoms num-
bered 14 and 15

or

R₁ is missing,

R₂ is allyl and

there is a double bond between the carbon atoms
numbered 14 and 15,

have interesting immunosuppressant and anti-inflamma-
tory properties.

They are obtained by fermentation or synthesis, e.g. by
hydrogenation or dehydration.

9 Claims, 4 Drawing Sheets

FIG. 1

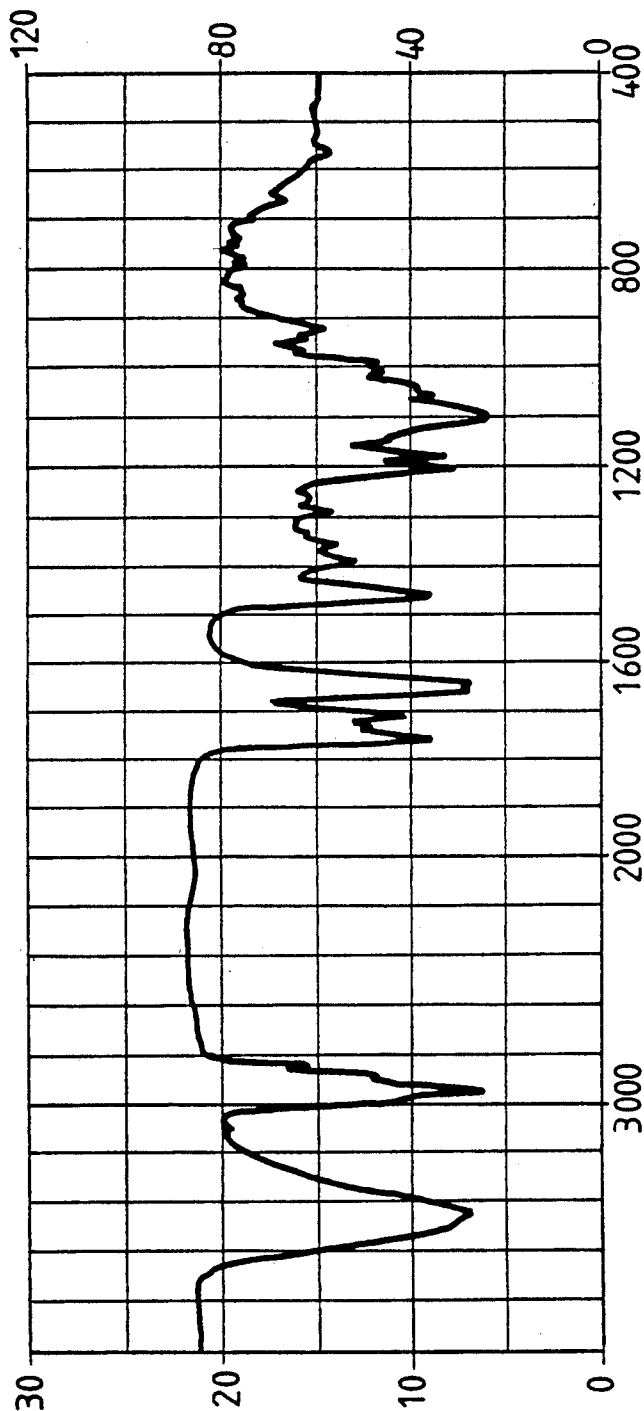


FIG. 2

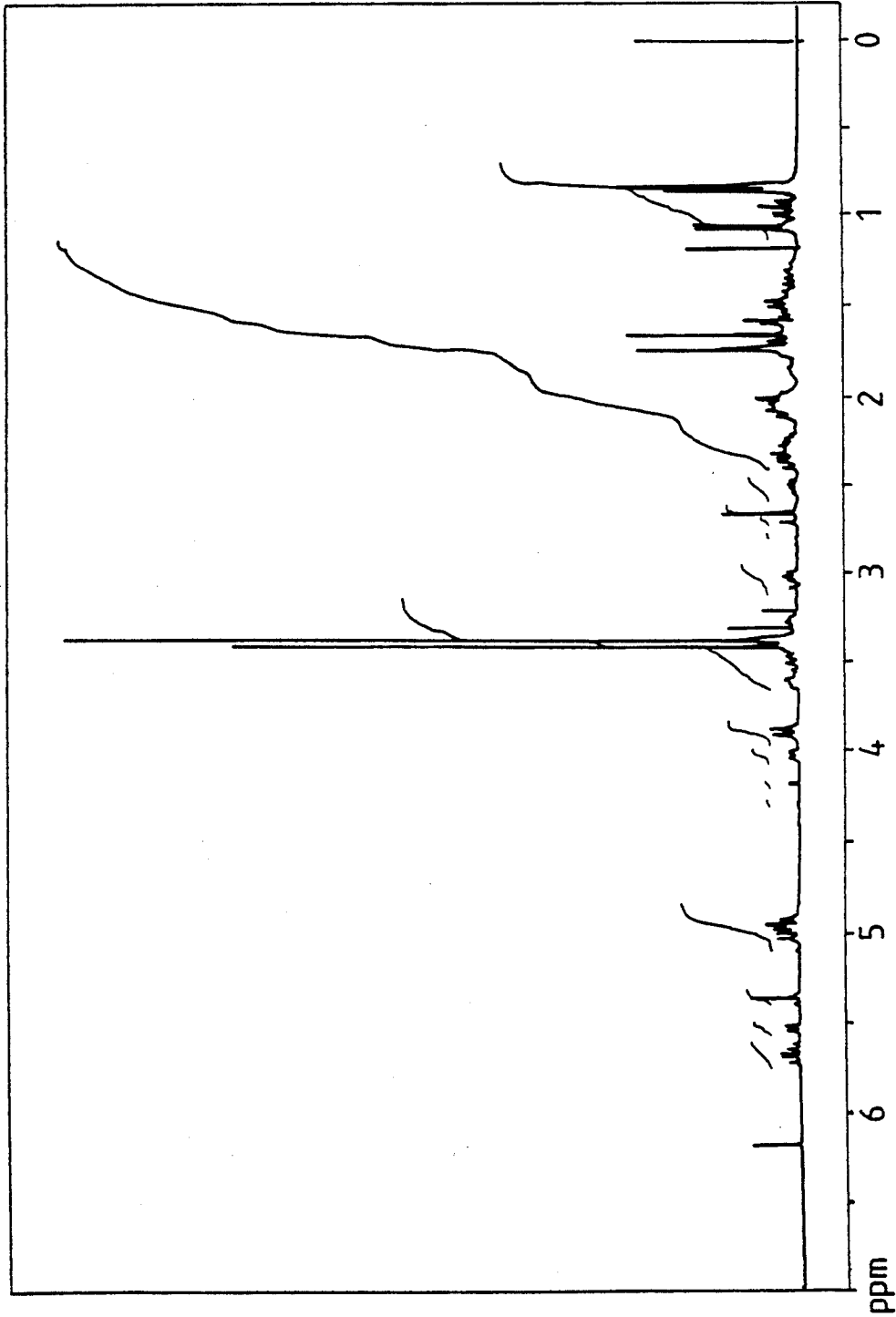


FIG. 3

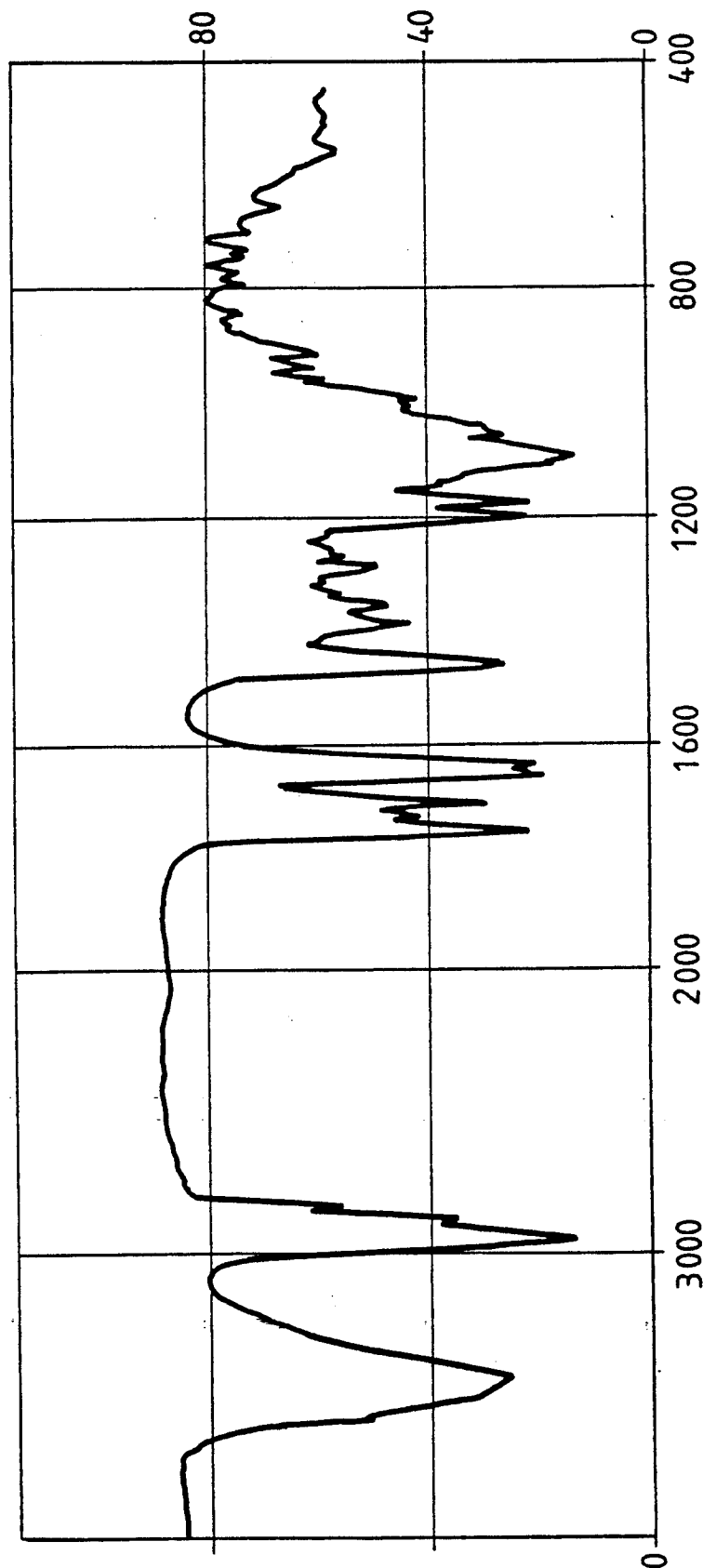
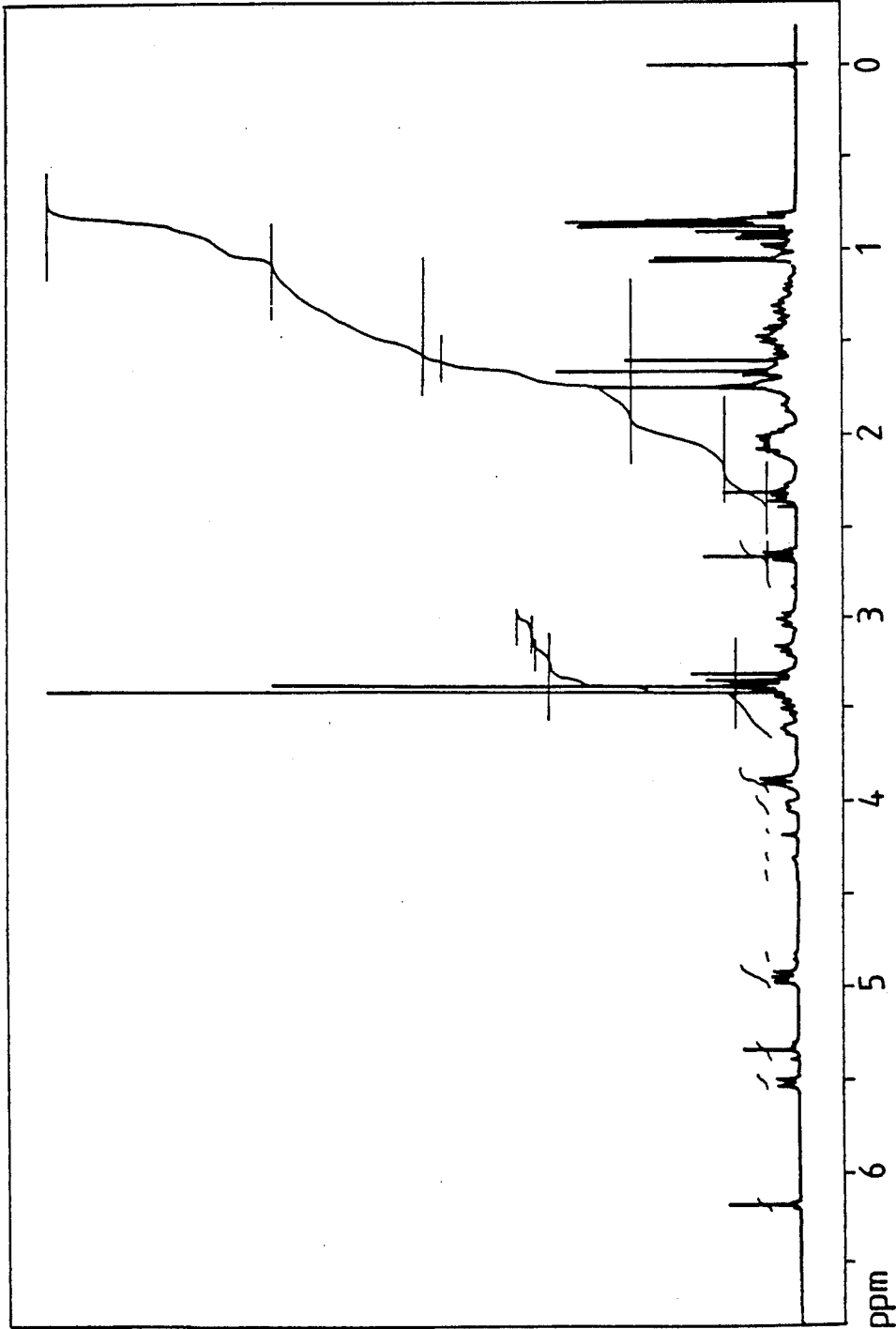


FIG. 4



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