

CURRENT PATENTS GAZETTE



www.current-patents.com

ISSN 1464-3499

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WEEK 01

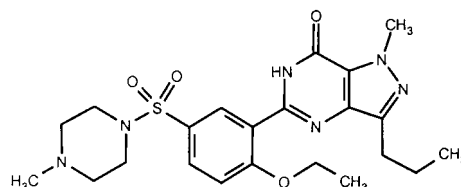
JANUARY 7TH 2000

DRUG PATENTING IN CONTEXT

Current Patents *Gazette* is the most rapid competitive intelligence service covering innovation in the pharmaceutical industry. Patent applications published during the past week have been classified and analysed, in order to place the inventions in context. For the most crucial innovations, those involving new chemical compounds, additional information is given in the form of front page images. These can be enlarged to show details of chemical structures and inventor teams, for example. Applications filed jointly, representing collaborative research, are highlighted, as are sequences of inter-related documents.

NEW THIS WEEK

Sildenafil (Viagra) has been the focus of a flurry of patenting activity in the past fortnight, including three unrelated applications from Pfizer, New Millennium and Nastech claiming formulations for the nasal administration of the drug.



HIGHLIGHTS THIS WEEK

We wish all of our readers a happy and prosperous New Year, of course, and are pleased to report that Current Patents *Gazette* has barely been affected by what was, in the UK at least, a somewhat protracted sequence of public holidays. We are referring to this first issue of the year 2000 as No 0001; it covers the **US patents** issued on **Tuesday January 4th** and the **PCT applications dated Thursday 6th**. We are also able to include the relatively small number of relevant **European applications** published last week, on **December 29th**, and hope to be able to catch up in No 0002. Paradoxically, there were no UK applications available in London this week, and so next week should include a three-week batch, though still amounting probably to no more than a dozen relevant inventions.

An application filed by Merck & Co in June 1986 continues to occupy the attention of the Company's attorneys and the USPTO. Having initially been subject to a couple of continuations-in-part, the application made relatively rapid progress with the US Examiner, and was **granted in July 1990** as **US4940727**, with claims to **novel lovastatin-type HMG-CoA reductase inhibitors**, useful as **antihypercholesterolemics**; a few months later the corresponding European case, **EP251625**, was granted. However, for reasons as yet unclear, the US patent was subject to **an application for reissue in November 1998** and has now appeared as **RE36481**; a related case, **US5116870**, is subject to a similar application.

Following an application last week (WO9966933) from the University of Kentucky's New Millennium Pharmaceutical Research, there is another this week (actually in the new millennium) concerned with a nasal approach to impotence problems. **Sildenafil**, far better known as **Viagra**, may be administered to the nasal mucosa in such a way as to produce "virtually instantaneous onset of beneficial effects", as the Kentucky researchers delicately state. Now the New York-based **Nastech Pharmaceutical** company, using **sildenafil citrate**, is seeking protection for similar intranasal dosage forms. Fortunately for **Pfizer**, the originator of sildenafil, their own UK-based researchers filed an application on the same subject just a few days earlier, and that published as a European application on December 29th (also in Section B of this CPG issue). Unlikely though it may seem, there is a third application claiming the use of sildenafil published this week, this one naming **Nutraceutical Scientific** of Los Angeles as applicant, with claims to compositions promoting nitric oxide activity. A not dissimilar case appeared last week in the name of **Medinox** of San Diego. It would be interesting to know whether a particular event or publication last June caused these five companies, apparently working independently, to file their similar applications with a seven-day period.

There are reports of changes of patent law, or at least practice, from both sides of the Atlantic. Both are concerned with patenting of life forms, but whereas the general effect in the US may be to make the claiming of genetic material more difficult, in Europe there seems to be a relaxation of patentability requirements. The US changes take the form of revised guidelines to Examiners, requiring that applicants "explicitly identify a specific and substantial utility" for the claimed products, and this is seen as particularly relevant gene sequences identified by such companies as Celera Genomics, said to have filed 6,500 provisional applications on the subject. In contrast the European Patent Office is reported to have lifted a four-year moratorium on patenting of plants and animals, bringing patent practice into line with the European Union's recent Directive on the patenting of biotechnological processes. Although this could have profound implications for the patenting of transgenic animals, it seems to be regarded as more relevant to plants, which could originally be protected by means of Plant Breeders' Rights.