

CURRENT PATENTS GAZETTE



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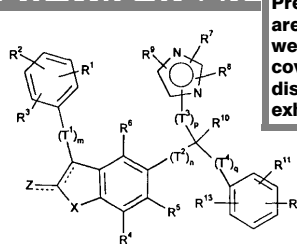
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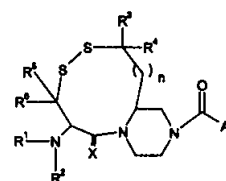
DRUG PATENTING IN CONTEXT

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



Prenyl transferase inhibitors are the target for SCRAS this week with two applications covering two structurally distinct series of compounds exhibiting this action.



HIGHLIGHTS THIS WEEK

Among 12 international applications published this week in the name of **Merck Patent GmbH (E Merck)** is a cluster of ten relating to the construction of **combinatorial libraries** of **geminally disubstituted amines**, both symmetrical and asymmetrical. It would seem that Merck has assembled a new team of synthetic chemists for this work, including one with experience in the specialized field of heterogeneous organometallic catalysis, and another previously associated with process development at Hoechst. However, at this early stage we are probably seeing only the "infrastructure" patenting, since the applications designate only **Europe, Japan, Korea** and the **US** for protection; any commercializable products to emerge from screening will most probably be the subject of more specific future claims. It may be of interest to note that one member of the series, bearing the rather unhelpful title "Geminally substituted amines", has been classified under the even more unhelpful **IPC A12e** - one which until now has not existed in official listings.

AnalytiCon is a company specializing in chromatographic separation of the components of natural extracts. In an application published this week the Berlin-based company claims apparatus for fractionation under pressure, which enables such separations to be effected more rapidly and more simply than in conventional columns. This interesting innovation clearly has implications for the way in which the active constituents of **natural product extracts** are characterized and claimed. It serves to reinforce the protection for AnalytiCon's **SEPBOX** technology, as described in **WO9813118**.

It is never easy to be sure that a particular invention marks the start of a new project, but certainly there seems to be little or no precedent for **Eisai's** interest in marine natural product antimicrobials; work on **halichondrins** at the company's US research location in Maine is reported in a PCT application, most previous disclosures on the subject being of non-or semi-industrial origin. Another applicant seen to be operating in unfamiliar territory, in more senses than one, is the **Société de Conseils de Recherches et d'Applications Scientifique (SCRAS)**, with two applications claiming structurally distinct series of **prenyl transferase inhibitors**. These two cases, possibly linked through inventorship to Biomeasure, are from the SCRAS research site in Massachusetts, as is a third concerned with **somatostatin analogues**.

At the other extreme, there are applications representing continuation of projects already under way for a decade or more, with varying degrees of success. **Lilly**, for example, already spectacularly successful with **Prozac** in the serotonin reuptake inhibitor field, continues to research agents acting selectively at **5-HT_{1F} receptors**. **Merck** too is seen to be pursuing a long-term objective in its ongoing **GABA_A modulator** patenting program, initiated in the early 1990s by the cloning of specific receptor subtypes. A rather different situation arises in **Glaxo's** patenting of novel β_3 -agonists, since the agents claimed bear more than a passing resemblance to structures first synthesized ten years ago, but since apparently not subject to further investigation; a new US-based team has been brought together to revisit this topic

As reported in Nature 402, 852; 1999, a recent US court decision has the effect of lifting the ban on patenting "**methods of doing business**". Although at first sight irrelevant to the pharmaceutical and biotech sectors, these moves could have an important impact on laboratory scientists, since many programs and protocols routinely used in practical work may now qualify for patent protection. The argument against patenting software was that software is an arrangement of algorithms, similar to any mathematical formula or abstract idea that cannot be removed from the public domain. Businesses are becoming aware of the possible impact of these decisions. A deluge of patent applications, for such diverse business methods as Internet advertising and invoicing systems is now said to be arriving at the US Patent and Trademark Office. The Gazette covers such peripheral inventions: an example was seen recently in **US5984685**, in which Children's Mercy Hospital claims a diagnostic method based on the use of color-coded cards.