

US bid to patent human-animal hybrid fails

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[LONDON] The US Patent and Trademark Office has rejected a provocative patent application filed by two prominent biotechnology critics on techniques for combining human and animal cells to create hybrids or chimaera.

The patent was filed by researcher Stuart Newman of New York Medical College, a prominent member of the Council for Responsible Genetics, and Jeremy Rifkin, president of the lobbying group the Foundation on Economic Trends. Both are keen to open up political debate on what can and cannot be patented when human cells are involved (see *Nature* **392**, 423; 1998).

In rejecting the application, the patent office lists prominently among its objections the fact that "the claimed invention as a whole embraces a human being", and that its subject matter therefore lies outside the scope of US patent law.

The examiner who rejected the application admitted that the patenting of human beings was not explicitly ruled out in an earlier judgement, the famous Chakrabarty case in the early 1980s which cleared the way for patents on living organisms - and the growth of the US biotechnology industry.

The examiner lists a variety of reasons for rejecting the application, including the fact that several previous efforts at introducing human cells into animal tissues have been described in the scientific literature. She also argues that, despite the Chakrabarty judgement, in drawing up patent legislation "Congress did not intend [the US Patent Act] to include the patenting of human beings".

But Pat Coyne, the Washington-based attorney who is handling the patent application, says: "We do not think this is a proper ground to reject the application. We feel that the key issue is: what does it mean to 'embrace' a human being? How does the patent office get the authority to say that, because in its extreme form our claimed invention could do this, it is not patentable? ."

Rifkin says: "No parliament in the world is going to be keen to debate how much human genetic information [in a chimaeric organism] makes up a human being. But we want to force them to do it." He and Newman are appealing against the rejection of their application.

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