

# The New York Times

## U.S. Revokes Stem Cell Patent

By [ANDREW POLLACK](#)  
Published: April 3, 2007

The United States Patent and Trademark Office has made a preliminary decision to revoke fundamental patents on human embryonic stem cells that some scientists and consumer groups say have impeded research into a promising new field.

After a re-examination, patent examiners rejected all claims of the three patents already issued, which are based on the work of James A. Thomson of the University of Wisconsin.

In decisions posted today on the agency's Web site, the examiners said the Wisconsin cells appeared to be either the same or obvious variations of cells described in previous patents issued to others or in scientific papers.

The Wisconsin Alumni Research Foundation, the patent licensing arm of the university, will still have a chance to prove Dr. Thomson's work was novel and deserving of patents. If it loses again, it can still appeal, meaning the matter might not be resolved for years.

It is now much more likely, however, that the patents will be narrowed or revoked, and some scientists or companies might become more confident in undertaking research that would infringe the patents.

"It's not the final nail in the coffin, but it's a heavy body blow," said Daniel B. Ravicher, a patent lawyer and executive director of the Public Patent Foundation, a New York nonprofit organization that tries to overturn what it views as patents not in the public interest. "This rejection is substantial, and it will cause a significant deterioration in the impact the patent will have in the marketplace."

The Public Patent Foundation requested the re-examination in July. It acted with the Foundation for Taxpayer and Consumer Rights, a California consumer group that claimed the patents could impede that state's \$3 billion effort to develop medical treatments from human embryonic stem cells.

The cells have the potential to turn into any type of body tissue. The isolation of them by Dr. Thomson in 1998 set off a big effort to turn that basic technology into treatments for various diseases.

Some scientists have complained, however, that the Wisconsin patents are too broad and have been hindering research while also putting the United States behind other countries. At least

one company, Invitrogen, has said it conducted some of its stem cell research abroad because the patents apply only in the United States.

The Wisconsin Alumni Research Foundation has said the patents apply to all human embryonic stem cells, no matter how derived, but had not slowed research. It said academic researchers were entitled to free licenses and had to pay only \$500 for cells. The terms in general have been made less restrictive over time in response to complaints.

Companies are charged \$75,000 to \$400,000, depending on their size and the terms of the license.

The Geron Corporation, which financed some of Dr. Thomson's research, has exclusive commercial rights to heart, nerve and pancreatic cells derived from the human embryonic stem cells. So if the patents remain in effect, any company wanting to market a treatment for heart attacks, Parkinson's disease or diabetes using human embryonic stem cells would eventually have to come to terms with Geron.