

Semiconductor Chips and Stem Cells: New Wine for New Bottles?

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This paper provides a contrast between semiconductor technology and the economics surrounding the semiconductor industry and stem-cell technology and its surrounding economics, to make the case for *sui generis* intellectual property protection for stem cells. I will establish that just as semiconductors failed to meet the social bargains of copyright and patent in the early 80's, stem cell technology presently fails to meet the patent bargain requirements of novelty, non-obviousness and utility. Nevertheless, like semiconductors, the high cost of stem cell research and development, coupled with the need to sustain continued economic growth of the biotechnology industry, mandates that Congress provide some level of exclusive rights to bridge the existing gap. *Sui generis* IP protection for stem cells would preserve the incentive to continue innovation. However, as illustrated in the semiconductor industry, any *sui generis* protection for stem cells must include limitations that address the need to provide an appropriate level of public access to facilitate efficient and effective downstream research in the area of regenerative medicine, thereby enriching the public domain.