PatentSimT - Multi-User Interactive Patent System Simulation

Andrew Torrance

Patent systems are often justified by assumptions that inventive activity will be spurred by the prospect of patent protection, leading to the accrual of greater societal benefits than would be possible under non-patent systems. One way to test this hypothesis is experimentally to simulate the behavior of inventors and licensees, in particular, and society, in general, under conditions approximating patent and non-patent systems. By measuring differences in a metric representing societal benefit, it is possible to make direct quantitative comparisons between such alternative systems. A multi-user interactive simulation system ("PatentSimT") is used to test hypotheses of individual and societal benefits by varying incentives for such activities as invention, licensing, and infringement by creating a simplified model of the inventive process, and networking together multiple users so they can interact through this system. Pa tentSimT uses an abstracted and cumulative model of potential innovations, a database of potential innovations, an interactive interface that allows users to invent these innovations, and a network over which users may interact with one another. Users can potentially cooperate or compete by recombining simpler inventions into more complex and powerful combination inventions. PatentSimT is used to test hypotheses regarding the benefits conferred on society, in general, and inventors and licensees, in particular, under patent and non-patent systems.