FROM BETTER MOUSE TRAPS TO BETTER MICE

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How much has the patent system really contributed to the "progress of science and of the useful arts?" Science seems to have done fine without it. Scientific discoveries as such are not patentable in the first place. Through a system of grants and prizes from private and governmental foundations, science has done rather splendidly. As for the useful arts, from the engineering of mousetraps to the engineering of mice, the record would appear rather mixed. There have been vociferous arguments for and against the patent system. In the end, it has been generally accepted "since nothing else seemed to be found to replace it," as one governmental commission put it. Meanwhile, it has spread virtually all over the world.

The intent of patents is to benefit society while encouraging and protecting the inventor. But if one could total up the benefits received by society that it would not have received otherwise and the profits and encouragements received by inventors, and if one could compare them to the losses incurred by various negative practices, together with the despair to which many an inventor has been driven through ruinous law suits, the patent system might appear as an enormous and unwieldy machine whose ultimate beneficiaries are neither science, the useful arts, the inventors, nor society, but patent agents, attorneys, and functionaries, who eventually collect their fees or paychecks.

Since the 1982 reorganization of the Federal Court System that deals with patents, the attitude of the courts has swung from considering patents as "marginally enforceable claims" to "immensely valuable assets," while the notion of "intellectual property" has been expanded to "include life forms, mathematical formulations, and even financial tactics" (E. L. Andrews, *New York Times*, May 13, 1990). The "proprietary community"—i.e., patent experts and companies heavily involved in research—is very much in favor of the shift, but some worry that "society is not well served when protection becomes ubiquitous and pervasive" (U.S. Rep. Kastenmeir). No doubt, in time, this attitude will change, as it always has in the past, with the rhythm of the economy.

Meanwhile, damaging precedents may be set. The matter of intellectual property rights is reckoned to become a major and volatile issue of international trade during the 1990's. Research firms in industrialized nations are anxious to obtain returns on their investments, while developing countries fear to be kept out of profitable ventures and to be recolonized by technobusinesses.

In the scramble to stake out claim upon claim on more and more areas of the "intellectual commons," few are willing to pause and ask fundamental questions. A chilling thought occurs. Around 1760, at the onset of the first Industrial Revolution, after the British Parliament passed the Enclosure Acts, enclosing the commons for the benefits of local squires, masses of vagabonds suddenly appeared on the roads as if by magic. When the frontier closed in the American West, with the land all staked out by land and railroad companies, a whole new proletariat appeared at the gates of the new factories. When the "commons of knowledge" is staked out as soon as it emerges, who will be the new vagabonds of the mind? Where will they dwell and how will they live? The fundamental question is, therefore: "How do we optimize creativity in a global information commons without covering it with a net of intellectual barbed wire?"

"Knowledge is becoming what physical labor, land, minerals, and energy used to be: the primary source of power for each person, each organization, each society... information cannot be 'owned' (only its assembly and delivery service can). Knowledge isn't exchanged in a market but shared in a kind of commons... the mark of a commons is that it cannot be readily divided or appropriated and that it requires an unusual degree of cooperation to be explored or used at all." HARLAND CLEVELAND Change (May/June 1989)

"You could arrive at the point where every idea, every concept, every minor device is somebody's property. The transaction costs of conducting business and even of just living life would be prohibitive."

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