

time consuming. Chinese laws give enough scope for practitioners of TCM to protect their own creations. Patents are preferred to databases to define the prior art.

XII. FLEXIBILITY OF THE PATENT SYSTEM?

There are some commentators who find that the entire patent system is inflexible and unsuitable to protect TM.¹⁸² History does not support this viewpoint. A good example is the evolution of the original conception of a patent, which was designed to secure the individual's rights. This has changed over time so that patents are now owned by large companies, particularly in the pharmaceutical industry. There are large costs associated with the research and development (R & D) of new drugs. The Pharmaceutical Research and Manufacturers of America estimates that the U.S. industry spent over \$30 billion on R & D in 2001. They estimate that, on average, each new marketable drug costs half a billion dollars to develop.¹⁸³ Profits that emanate from pharmaceutical innovations have to recover high R & D costs.

Patents continue to protect the work of the individual, albeit in a more complex way. Individual inventors may transfer, license or otherwise confer patent rights upon corporate bodies. This transfer is not without consideration, as the individual inventor can expect to be remunerated. It must of course be borne in mind that, unlike the simple tools that existed in previous centuries, modern pharmacological innovations require a complex research infrastructure. When an individual working within the industry invents a patentable idea, they have used R & D money from their employers. The individual would perhaps not surprisingly waive their rights to claim an interest in the idea they create. These individuals are often engaged in high income jobs. It appears reasonable to sanction the idea that the individual may use this benefit in the way they see fit. There is, however, still some nod in the direction of independence, as Hamilton (1941) notes:

As the corporation became master to his profession, the inventor passed into its service. As he accepts pecuniary allegiance, a vestige of his own status is reserved to him; the device or process which he contrives is initially his property; he applies for a patent and it is issued in his name. But there the cloak of a nominal independence is put off; he is an employee, he works for a salary, his contract obligates him to sign away his rights.¹⁸⁴

The patent system in the US has changed significantly from the original conception as codified by the founding fathers. This is not to suggest that this process is negative. An institution is not immune to societal changes. In order to survive, the patent system has to change.¹⁸⁵ When these observations are considered within the debate on patent-

¹⁸² See Hanellin, *supra* note 17, at 186.

¹⁸³ Carrie Conaway, *Too Much of a Good Thing Can be Bad*, published at <<http://www.bos.frb.org/economic/nerr/rr2003/q1/toomuch.htm>> 2003 (last visited Sept. 5, 2006).

¹⁸⁴ Walton Hamilton, *Patents and Free Enterprise* (Temporary National Economic Committee, Monograph No. 31) (76th Congress 3d Session Senate Committee Print 1941, in Robert P. Merges, *Foundations of Intellectual Property*, 48 (Foundation Press 2004)). It should be noted that under the proposed Patent Reform Act of 2005 an application could also be filed under an assignee.

¹⁸⁵ See *id.*