This study demonstrates the usefulness of patent and citation data in illuminating the process of technological change and as a powerful tool for research in the economics of technology and innovation.

Excerpt from the book

Not all innovations are equal. Though recent economic literature on the evaluation of technological change acknowledges this reality, actual evaluation methods suffer from numerous limitations. Technological Innovation Index uses patent citation analysis to highlight the enormous variation in the characteristics, importance and evolution of technology over time and outlines a set of sophisticated
tools for its analysis. Prominent among them is “Patent Importance Technology Factor” (PITF), an improved algorithm for the calculation of patent impact using citation scores. The usefulness of PITF is illustrated by examining the evolution paths of high-impact innovations. The methods proposed have important implications for the measurement of technological change and would be of interest to a wide range of patent specialists, including economists, technology evaluators, and finance and law professionals.

The Patent iNSIGHT Pro, an advanced patent research and mapping software program was used to generate various data from various databases for the book.

You can purchase the book at Amazon or at Vernon press website

Author biography

Dr. Fredrick Pachys has studied Life Science, Electronic Engineering, Business and Economics since 1976. He holds a B.A. and M.B.A from the University of Derby, UK and a PhD degree from the Department of Economics and Regional Studies in the University of Pécs, Hungary. He has worked as an electronic engineer in several institutes, where he also saw his ideas through to commercialization. He has been president of Amit Technology Science & Medicine Ltd since 1984, a research and development firm specializing in radiotherapy, nuclear medicine, biotechnology, nanotechnology and diagnostic products. He owns patents in the fields of Homeland Security, Agriculture and Medicine and has a long experience in the development of medical and other science-based products. Dr. Pachys has extensive experience in mentoring university students and helping companies realize innovation projects. In his role as a business development consultant, he has provided services in Technological Innovation and Intellectual Property Analysis across a broad range of sectors including: Life Sciences; Healthcare; Energy; Consumer Products; Communications Electronics; & Transpiration.