

Freddy Pachys

Technological Innovation Index

A novel innovation indicator and its implications for technology evaluation

SERIES IN ECONOMICS OF TECHNOLOGICAL CHANGE

“The work of Fredrick Pachys signifies a further and important contribution towards our ability to quantify in a meaningful way the “importance” or “impact” of patents. There is no question that in this era of accelerated innovations we need better indicators of the significance of patents, both for academic purposes and for policy - PITF is a milestone in that direction.”

Prof. Manuel Trajtenberg

Tel-Aviv University, Author of “Patents, Citations and Innovations: A Window on the Knowledge Economy” (with Adam Jaffe). Cambridge, Mass.: MIT Press, 2002.

About the author

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.

Summary

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, finance and law professionals.

Freddy Pachys

Technological Innovation Index

A novel innovation indicator and its implications for technology evaluation



VERNON PRESS
SERIES IN ECONOMICS OF TECHNOLOGICAL CHANGE

December 2013 | Hardback 236x160mm | 164 Pages | ISBN: 978-1-62273-008-7
Also in Paperback (\$35/€33/£28) | ISBN: 978-1-62273-213-5

SUBJECTS Innovation, Economics of Technological Change, Patents

VIEW/ORDER ONLINE AT vernonpress.com/book/19

\$ 45

€ 40

£ 34

12% DISCOUNT ONLINE
USE CODE AT CHECKOUT

FLYPR12



VERNON PRESS
www.vernonpress.com