Chapter 1 discusses the econometric pitfalls associated with the use of patent production functions to study the invention process. It then goes on to argue that a sound understanding of the invention process necessarily requires an understanding of the propensity to patent. The empirical analysis carried out in Chapter 1 seeks to explain the proportion of inventions patented – a potential metric for the propensity to patent – from an international sample of manufacturing firms.

Chapter 2 proposes a methodology to filter out the noise induced by varying patent practices in the R&D-patent relationship. The methodology explicitly decomposes the patent-to-R&D ratio into its components of productivity and propensity. It is then applied to a novel data set of priority patent applications in four countries and six industries.

Chapter 3 takes stock of the literature on the role of fees in patent systems while Chapter 4 presents estimates of the price elasticity of demand for patents at the trilateral offices (that is, in the U.S., Japan and Europe). The estimation of dynamic panel data models of patent applications suggests that the long-term price elasticity is about -0.30.