6.931 Development of Inventions and Creative Ideas Spring 2008

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CREATE OR PERISH The Case for Inventions and Patents

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INTRODUCTION

The American patent system needs no apologists. Though it may not be entirely suited in all respects to our current problems and needs, and though sometimes it may have been misused, its record of achievement in the progress of our country is indelibly written on the pages of history. Its current service, despite the fact that it is not being fully utilized in the second half of the century, seems to me equally indisputable; though some critics without firsthand experience in this field may not agree. Those critics are free to write their own books.

I have undertaken to write mine as a champion of the philosophy that today, as much as ever, incentives that make a person fight to be an individual promote the welfare the whole state. In my lectures, many of which have been included in this book, I frankly paint a picture, particularly for engineers and applied scientists, that is based on this philosophy and thus supports patents¹

But invention, patents, and innovation cannot be treated apart from their social, political, and economic environment, despite mechanistic courses given in law schools. Thus, to review the principles of patent law without delving into the interplay of many aspects of our society would be to discuss a theoretical, nonexistent system. This book, therefore, is not addressed solely to engineers and applied scientists; some parts are addressed to lawyers, economists, businessmen, and politicians.

I have found the problem of presenting all facets so that they may be understood by readers of quite varied disciplines to be not without difficulty. For this reason illustrations have been confined to technology that can readily be comprehended by nontechnicians, and legal and economic discussions have been kept sufficiently elementary to be grasped at least in part by the technical reader, but without sacrificing the point intended for the legalist or economist.

Those who expect an engineering "cookbook" approach to this subject will not find it here. Similarly, those who look for a presentation in the form of a Procrustean "case study" will be equally disappointed.

To write an interdisciplinary book requires a mixture of interdisciplinary techniques, and so I have tried to interweave history, primary principles, procedures, problems, and points of conflict into what I believe to be the true fabric pattern of the patent system, struggling to stay alive in a world of rapid change. Because of this somewhat unorthodox approach, I have summarized the scope

¹Gordon McKay Lectures on Patent Law, given at Harvard University, 1956-58.

of each chapter at its head, and, in some cases, the reason for the approach used in order that the reader may better understand my mode or presentation.

In Chapter 1, a survey of the origin and historical background of the American patent system is presented; and, at its conclusion, serious questions are raised as to whether that system is currently either effectively performing its original historical purposes or meeting the requirements of the present. I hope that by the end of the book, the reader may have gained an insight into some of the answers to these questions.

Chapter 2 reviews the role of the Patent Office and the courts in administration of the patent laws, especially for the benefit of those unfamiliar with the administrative details of patent application prosecution and judicial review.

The statutory provisions of American patent law are discussed in Chapter 3, with reference to actual cases interpreted and decided by the courts. While the classes of patentable inventions and the conditions of patentability can be readily agreed upon, there is widespread conflict as to the standard set by the 1952 Patent Act to determine what is "invention" and what is "obvious." I have, accordingly, devoted a section of this chapter to discussing this conflict, giving my own views – predicated upon what I feel is in the national interest, namely an interpretation that encourages the independent American inventor and his backers as well as corporate inventors. In this connection the chapter concludes with statistics offered by leading independent inventors pointing up their vital *current* contributions to technology and the necessity for liberal and sympathetic legal recognition of their work if the *independent* inventor is not to disappear from the American scene.

In Chapter 4, I have carried forward an illustrative approach found most effective in lecturing: tying together the complete picture of innovation – from the conception and invention stage, through financial backing and development, entrepreneuring, business formation, and legal contests with pirates. Here I have used the medium of the Bell Telephone Cases, because this outdated invention involves technology and a degree of importance familiar to all readers, and because almost everything that could happen did happen to Bell, except the anonymity experienced by many current inventors from which he was saved by a single vote in the Supreme Court.

Strongly woven through the fabric of the invention-innovation cycle are the relations between inventor and employer and between inventor and potential user or licensee. These include typical industrial, university, and governmental contract provisions. Since inventions are frequently stolen, the pitfalls facing the inventor are reviewed in Chapter 5. There are, however, very few proven cases of such piracy, and so I have selected a previously little-known example (in the field of piezoelectricity) that took over two decades to document and establish by legal decision. The publication of this exposure, it is hoped, may forewarn the inventor, and perhaps give second thoughts to business and governmental agencies in the matter of trying to circumvent the proprietary position of inventors.

Chapter 6 discusses critically recent proposals for improving the patent system, including current conflicting views in Congress and the courts as to government rights in patents and other matters.

I have left to Chapter 7 a consideration of the exciting modernization program being planned by the European Economic Community with the view of providing a single common European patent and law of patents. The possible effect of this upon the American system is noted, and some of my own views with regard to possible immediate improvements in the administration of our system are presented.

Though one of expected primary groups of readers of this book is the engineering profession, the solution to current problems in the protection of inventions and patents calls for more than mere engineering consideration. There is a decided, and even primary, legal side concerning which something must be said. In Chapter 8, therefore, I have supplemented Chapter 7's technical suggestions for Patent Office and administrative improvement with proposals for modernizing judicial review. I have tried to formulate these in language that engineers can follow, but without losing their force for the legal and quasi-legal professionals.

Chapter 9 points up the general economic consequences of the above problems.

If in the end I am considered to have been too harsh on the courts of our land, my answer must be that my position is based on more than mere academic study. My attack is considered, deliberate, and to me necessary. My plea is simple. Before it is too late, let us restore to the individual his importance and dignity, and recognize and protect the fruits of his mind. A dynamic society led by free and encouraged creative minds – with government back in its role of servant and partner – offers the Free World's best hope.