

there were about 66,000 patents listed. In England and Germany, Licenses of Right, about 5% of all, are applied for voluntarily, for half-fees, and with the likelihood that the invention will be considered of small value.⁴⁶²

[477] To sum up on compulsory licensing, the half century of congressional study of its adoption along conventional lines should be terminated by consulting the experience of all other countries. This shows unanimously that even if commendable in aim, such compulsory licensing is practically unused in fact, and would not be worth its inches in the statute book. But new types of compulsory licensing, the court-imposed antitrust penalty, or vigorous administration by a commission, or some other way escaping dependence on plaintiffs' plaintive suits, might well be studied. In any case the substitute institutions are patent cross-licensing and pooling, trade association inventing, Government helps for invention, and against monopoly all the familiar deterrents.

[478] 14. PATENT POOLING AND CROSS-LICENSING, which we found prevailing in about 13% of the patents and 4½% of R&D, began in America with the combination of manufacturers of the Howe and Singer sewing machines, about 1860.⁴⁶³ Along with court-imposed compulsory licensing, it has come to be the status, if *not* the principal motivation, of a large part of our valuable patented invention. Yet it has often been attacked as a breeder of monopoly, notably by Vaughan.²⁵⁴ As an economist of invention he should have known better, but he had an obsession against monopoly.

[479] We have a proverb, whose trace of profanity is impossible to expurgate: "That's a helluva way to run a railroad." Suppose when some court is reorganizing a bankrupt railroad, the court should divide the engineering department between several independent corporations, each of which was given the right to hamper or stop entirely the operations of the road, until its demands were met, demands for the largest share of the profits that might hopefully be extracted by this veto tactic. And this game of mutual holdup to be practiced not just once, but habitually. What way would that be to run a railroad? Why, the patent way, like the good old patent system, invented in 1474, which gives the owner of each improvement the right to forbid any use of it for 17 years, unless his demands are met. It survives because we have learned several ways to abate it, one of which is patent pooling. Just as the railroads would bankrupt each other if they practiced free competition, as every economist knows, and as the ICC recognizes by setting minimum rates, so business, particularly big business, has learned to abate the patent system's root defect of the veto on use of one's invention, by various evolved devices. One is patent pooling or cross-licensing, one is comity, or decent modesty in demands, one is getting power over the patentee by any devices of pressure, legal attack, or purchase, and one is compulsory licensing, imposed by our Federal courts.

[480] Howard,⁴⁶⁴ reviewing the efforts of our Government, sometimes to create patent pools, but after each major step forward in petroleum technology suing to destroy the adopted pool, said that patent policy should be based on live and let live, not on kill or be killed. He thought a permanent Government conciliation service in the Antitrust Division might be the solution, just as labor conciliation has become an essential part of our labor machinery.