

# Statement of Robert Barr, IPR department of CISCO

<http://swpat.ffii.org/papri/ftc02/cisco/index.en.html>

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Robert Barr, vice president and head of patent department of Cisco Inc complains that the patenting consumes resources of CISCO and innovative companies in software-related fields without promoting innovation, and in fact penalises innovators, asks for restriction of patentability to fields where it can be shown that patents benefit society.

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**source:** Statement of Robert Barr, IPR department of CISCO<sup>1</sup>

*Cisco Systems designs and sells network equipment. Cisco was founded in 1984 and went public in 1989. Between 1984 and 1993, the first ten years, the company filed only one patent. In 1994 the company had grown to over \$1B in annual revenue. This growth was obviously not fueled by patents, it was fueled by competition and by open non-proprietary interfaces. But in 1994, the company started a program to obtain more patents. We did this for defensive purposes, to have something to offer in cross-licenses with*

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\*<http://www.ffii.org/~phm>

<sup>1</sup><http://www.ftc.gov/opp/intellect/barrrobert.doc>

*older companies who had large patent portfolios and used them to obtain revenue and design freedom through licensing. We filed 6 patents in 1994, and increased that each year; we are now filing over 700 patents/year. We have entered into several cross-licenses and we have been involved in several costly patent lawsuits. I would like to discuss the relationship between patents and innovation at Cisco.*

*Cisco is an innovative company. Our Chief Development Officer, Mario Mazzola, defines innovation as “a more efficient and creative way of providing customers with products and technology that deliver new levels of functionality and services that were previously unattainable. Innovation is more than just a new idea - it is about taking a new idea and developing it into customer value and positive business impact”. We have done this, we have brought products to market that have helped create the Internet as it exists today and that have helped change the way people communicate.*

*My observation is that patents have not been a positive force in stimulating innovation at Cisco. Competition has been the motivator; bringing new products to market in a timely manner is critical. Everything we have done to create new products would have been done even if we could not obtain patents on the innovations and inventions contained in these products. I know this because no one has ever asked me “can we patent this?” before deciding whether to invest time and resources into product development.*

*On the other hand, I am sometimes asked whether anyone else has a patent on a product or feature that we are considering. But, despite the fact that our products are independently developed, that we do not copy, I can never definitively “clear” a product or feature, or determine the costs of licensing in advance. First of all, there is the well-known “hold-up” problem, where patents issue after the product is in the marketplace and design-around is costly. As Prof. Shapiro notes, the hold-up problem is worst in industries like ours where a large number of patents can potentially read on a given product because the likelihood of stepping on a land mine is so great. I would add that even early publication does not solve the problem, because of the uncertainty about the claims that will issue. I would also add that, in addition to the hold-up problem, the large number of issued patents in our field makes it is virtually impossible to search all potentially relevant patents, review the claims, and evaluate the possibility of an infringement claim or the need for a license. And the penalty for so-called “willful” infringement makes this a really bad idea. It makes more business sense to assume that, despite the fact that we do not copy other company’s products, and despite the fact that we do not derive solutions to problems from the patent literature, we will be accused of patent infringement. The only practical response to this problem of unintentional and sometimes unavoidable patent infringement is to file hundreds of patents each year ourselves, so that we can have something to bring to the table in cross-licensing negotiations. In other words, the only*

*rational response to the large number of patents in our field is to contribute to it.*

*The time and money we spend on patent filings, prosecution, and maintenance, litigation and licensing could be better spent on product development and research leading to more innovation. But we are filing hundreds of patents each year for reasons unrelated to promoting or protecting innovation.*

*We will certainly benefit from having patents to help deter copying of our products. This is why patents are so critical in other industries, such as pharmaceuticals and medical devices, to prevent copying. But we don't need to file this many patents to deter copying, we would need maybe one, two or three patents for each product, which is what I believe you will find in those industries. Instead, since our purpose is to create a portfolio for cross-licensing, we find it necessary to stockpile patents and contribute to a backlog in the Patent Office that has reached 3-4 years in our technology area. In an industry where healthy competition makes time to market critical, and the pace of innovation is so rapid, that's a long time to wait for a patent. Too long. The system is in danger of destroying itself.*

*Moreover, stockpiling patents does not really solve the problem of unintentional patent infringement through independent development. If we are accused of infringement by a patent holder who does not make and sell products, or who sells in much smaller volume than we do, our patents do not have sufficient value to the other party to deter a lawsuit or reduce the amount of money demanded by the other company. Thus, rather than rewarding innovation, the patent system penalizes innovative companies who successfully bring new products to the marketplace and it subsidizes or rewards those who fail to do so.*

*So obtaining patents has become for many people and companies an end in itself, not to protect an investment in research and development, not to license technology to others who need it, but to generate revenue through licensing ("holding up") other companies that actually make and sell products without even being aware of their patents. They try to patent things that other people or companies will unintentionally infringe and then they wait for those companies to successfully bring products to the marketplace. They place mines in the minefield. The people and companies (I am not just talking about individuals here) who file these patents and extract license fees from successful businesses play the patent system like a lottery. They gamble that people will infringe these patents without ever learning anything from the patentee, and without interfering with any effort by the patentee to commercially exploit their invention. The long delays in the patent office work to their benefit by keeping the eventual coverage of their patents indefinite while others produce products. They benefit from the high cost of litigation by demanding license fees that are less than the cost of litigation, hoping that people will pay even*

*if they don't infringe, or, if they do infringe, it will be too costly to change the product. This provides opportunities for contingency fee litigators, for licensing companies and consulting firms who claim to help people "mine" their patent portfolios for patents that even they didn't know they had. It's hard to see how this contributes to the progress of science and the useful arts.*

*And that's the point. The patent system does not exist to protect the rights of inventors, or any particular interest group. It doesn't exist to protect what we now call "intellectual property", as if it were protectable for its own sake. The patent system exists to protect the progress of science and the useful arts. If the patent system fails to do that in certain areas, then the costs and negative effects of the patent monopoly cannot be justified. Where the patent system enables true innovation, true progress, where it enables companies to bring new products to consumers in circumstances where they otherwise would not do it, or where it disseminates knowledge that others need and want, then it's working. There are certainly examples of industries where it serves these purposes, and these benefits must be preserved. But in my experience at Cisco and my prior experience representing a variety of companies, the negative effects of stockpiling patents, the consequences of innocent infringement through independent development, the cost of proving noninfringement or invalidity through patent litigation and the exploitation of the patent system as a revenue generating tool in its own right have hindered true innovation and outweighed the benefits.*