

**Competitive disadvantage through non-existing software patents****Pia WEISS**

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In the United States, the first patent was issued in 1793. According to economic understanding, it is often more difficult and more expensive to develop a product than to imitate it. As innovations are beneficial for consumers (and firms) are valuable for the society as a whole. However, if the invention is not protected, the inventor may find it unprofitable to innovate at all when he is not able to recover the research and development expenses by marketing the product (or process). Hence, most countries offer patent protection nowadays. Although for different reasons, the debate on patent protection has been refreshed in the U.S. and the EU recently. In the U.S., first empirical and theoretical studies show that the change of the patent system allowing software to be patented may have had an adverse effect on the rate of innovation in that particular branch. In the EU, the European Commission has announced to pass a Directive on computer-implemented patents. The latter's objective is to legalise the current practise of issuing software patents. During the hearing for the Directive, it has frequently been argued that the European firms will suffer a comparative disadvantage as compared to the U.S. competitors if the European patent system is not changed so that existing software patents are legalised and and new software patents can be issued.

The paper aims at addressing the question whether or not European firms experience a competitive disadvantage from the non-existence of European software patents. The model builds on a two country model. In one country (U.S.) domestic and foreign firms may obtain a patent. There are a number of firms engaged in a patent race. All products are developed. However, only the winner of the patent race obtains a patent as all other inventions infringe on the winner's invention. It can be demonstrated that the European firms do experience a competitive disadvantage *from the existence of a European software patent*, if they lose the race. Only if one of the European firms is winning the patent race the firm in question would prefer European software patents.