1. Introduction

The object of this book is to dissect the antitrust treatment in the US and under EU law of joint research and development (joint R&D), with some analysis of thereto connected agreements for the implementation of the result of such R&D collaborations, such as standardisation agreements. Special focus will be on the telecoms sector and the pharmaceutical and biotech industries. It is in these industries where collaboration into the creation and adoption of innovations seem to be ‘booming’ and is more common than in other industries; and where possible anticompetitive effects may also appear because of these collaborations. The book focuses on the evaluation and regulation of R&D collaborations under antitrust law, while the regulation of R&D ventures under merger regulations is left unchecked.

The book is divided into two main parts: firstly, US antitrust regulation and case law for R&D collaborations and, secondly, EU competition rules and case law applying to the same collaborations. The historical regulations and case law are analysed so that the contemporary rules and principles in both jurisdictions are presented in light of the relevant background. Under US antitrust law, I will therefore start by analysing the Justice Department’s 1980 guide for R&D joint ventures, while the National Cooperative Research (and Production) Act thereafter is presented. Under EU competition law, the three R&D block exemptions will be presented, starting with the block exemption from 1985. The case law originating from the EU Commission, under the old exemption procedure for paragraph 3 of the prohibition for anticompetitive agreement (mainly Article 85(3) Rome Treaty, now 101(3) TFEU), and the scant case law of EU courts will be analysed. The regulation of R&D collaborations in the two jurisdictions is thereafter compared.

The general conclusion of the book is that R&D collaborations have been, historically and contemporarily, treated leniently under both US and EU antitrust rules. R&D collaborations to create monopoly positions on future markets have been allowed to form on both sides of the Atlantic. Analysing R&D collaborations has been thwarted with the difficulties of identifying anticompetitive effects on any existing and future markets. Since the innovation process is problematic to predict,
and the difficulties vary immensely between different industries, making predictions about the potential anticompetitive effects of R&D collaborations is notoriously difficult. The analysis often focuses on the potential effects collaborations may have in the future, on product markets, while efforts have been invested in coming up with a test to analyse how R&D collaboration may have exclusionary or ‘collusionary’ effects on R&D as such. Scholars and competition authorities have come up with concepts such as ‘innovation market’ in attempts to have some kind of test or benchmark for identifying dominance and market power in the innovation process. While the notion of ‘innovation market’ has not been used by competition authorities since, and generally these efforts diminished by the beginning of 2000, there are scholars that still discuss and promote the concept of innovation market. In fact, the ‘innovation market’ seems today to have some kind of revival in the scholarly debate. Moreover, the fact that the 2010 EU R&D block exemption presented some more strict rules indicates that the EU Commission shows a nascent interest in the anticompetitive and anti-innovation effects of collusive R&D collaborations.

The author suggests at the end of the book that R&D collaborations would benefit from a more intense antitrust scrutiny. The antitrust analysis should be based on conclusions from economic research in the creation and sustainment of innovation – innovation competition. The antitrust scrutiny would need to distinguish between, on the one hand, incremental innovation efforts by often large and specialised firms already present in the market where the product or technology to be invented will be inserted. Then possibly dominance, competitors and market power may be identified since it may be predicted with some certainty that the innovation will materialise and how the market will react to the innovation. On the other hand, efforts to create radical or disruptive innovations possibly conducted by R&D-intensive firms in collaboration with other firms or universities are often difficult to predict and are generally pro-competitive. In reference to joint R&D to create radical or disruptive innovations, identifying exclusionary effects on future markets or on R&D in the area as such seems very difficult.

Nonetheless, as discussed at the end of the book, R&D-specific firms, when collaborating with larger firms, need some kind of protection so that the larger incumbent firms do not ‘shelve’ or stop the development of the R&D-specific firms’ disruptive inventions, for example an inventive compound, through long-term exclusive development or licensing agreements. Perhaps, if, for example, an R&D-intensive firm and a large pharma company enter into an exclusive development agreement, conduct identified as development for the aim to create the goal of the
Introduction

collaboration, for example a drug, needs to be taken within a three-year period of signing; otherwise, the R&D-specific firm may under competition law exit the exclusive agreement. It would be considered anticompetitive under the prohibition to shelve the drug and the R&D-specific firm’s effort for a longer period. In fact, shelving innovations with or without the R&D-intensive firm’s understanding of the intent of the pharma firm to stop or at least slow the development of the compound seems to turn around a similar strategy as the 'pay-for-delay' cases. The pharma firm possibly has a drug in the market and they try to prevent a competing drug from being developed by entering an exclusive agreement with the R&D-specific firm that developed the compound.

Apart from these hopefully rare situations, competition law should possibly only regulate the joint innovation efforts where the future market will, in all likelihood, materialise. However, to focus antitrust efforts on joint innovations where there is a clear indication of aim in the form of a distinct market and clear probability of success may encompass more efforts than perhaps perceived initially. Firstly, it would encompass the joint design efforts that today are common practice for many firms in order to develop the next model or generation of a current marketed product. Joint collaboration between current product market competitors to develop or design next year’s model may be scrutinised, since such collaborations may shelter collusive effects, either by aligning prices and costs or by aligning the products and design efforts as such to prevent competitors from initiating more disruptive innovation efforts.

Secondly, there seem to be procedures in certain industries that make it possible to predict a distinct market and clear probability of success for the joint effort. Standard-setting in some sectors of the telecom and IT industries seems today to be pre-dated by joint R&D in the pre-standardisation phase, where large firms with voting power in the relevant standard-setting organisation come together to conduct joint R&D and agree on what technology or innovation should be selected for the standard with the standard-setting organisation. This may be enough to also prove that the joint R&D effort by these firms possibly is anticompetitive. It will exclude competing innovations and decrease the incentive to conduct independent R&D for firms not included in the pre-standardisation consortia. Moreover, for the pharmaceutical sector, the FDA procedure for approving drugs together with the patent rules creates transparent R&D processes, where firms know early on what R&D competitors are conducting and what markets these competitors are aiming for. This creates the possibility for firms and competition
authorities to identify what firms are active in the sector of R&D and thus whether collaborations between them would likely decrease R&D efforts and competitive pressure or not.