Guidelines, taking a more flexible approach and applying the TTBER's principles by analogy, may be a more appropriate reference for assessment.[305]

C. Current TTBER and Accompanying Guidelines

I. New TTBER's Operative Principles

On 1 May 2004 the new Technology Transfer Block Exemption Regulation[306] became finally effective and therefore directly binding and enforceable in all Member States of the European Union.

However, pursuant to the transitional provision of Art.10,[307] the full harmonization effect of the TTBER was postponed until 1 April 2006. As for its final term of validity, the current TTBER is due to expire on 30 April 2014, after 10 years from its coming into force.[308]

In the premises,[309] it is stated that the new regulation shall meet the two requirements of ensuring effective competition and providing adequate legal security for undertakings, based on the simplification of the applicable regulatory framework and on the adoption of an economic-based approach,[310] with regard to the concrete impact of the agreements under consideration on the relevant market.

305 For a comparison with the former TTBER on the point of exclusion of patent pools from its coverage, see: Van Bael I., "Agreements Specifically Excluded from the Former TTBER", In: "Competition Law of the European Community", Kluwer Law International, 2005, p. 628 *et seq*.

306 Commission Regulation (EC) No. 772/2004 of 27 April 2004 on the application of Art.81(3) of the Treaty to categories of technology transfer agreements, (TTBER), OJ 2004 L 123/11, available at:
http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=en&model=guicheti&numdoc=32004R0772

307 *Id.,* Art.10 "Transitional period", stating that: "The prohibition laid down in Article 81(1) of the Treaty shall not apply during the period from 1 May 2004 to 31 March 2006 in respect of agreements already in force on 30 April 2004 which do not satisfy the conditions for exemption provided for in this Regulation but which, on 30 April 2004, satisfied the conditions for exemption provided for in Regulation (EC) No 240/96".

308 *Id.,* Art.11 "Period of validity".

309 *Id.,* Premise no. 4.

310 For a critical assessment on the economic approach promoted by the new TTBER, see i.a.: Bishop S., "From Black and White to Enlightenment? An Economic View of the Reform of EC Competition Rules on Technology Transfer", In: "EU Policy Issues: A Critical Examination of the Block Exemption Regulation and the Corresponding Guidelines", European University Institute - Robert Schuman Centre for Advanced Studies, The Annual EU Competition Law and Policy Workshops, 2005 Session, available at:
http://www.eui.eu/RSCAS/Research/Competition/2005/200510-CompBishop.pdf
A Critical Examination of the Block Exemption Regulation and the Corresponding Guidelines

Nevertheless, the evident benefits of such modern approach, and its underlying flexibility, come with a "toll", as it has been perceptively observed that: "The price to be paid for economic precision is a loss of legal certainty".[311]

1. Systematisation and Definition of Technology Pools

While patent pools are still excluded from the direct scope of application of the TTBER,[312] the fourth and last section of the Guidelines[313] is entirely dedicated to "Technology Pools", thereby amending for their technical exclusion from the direct field of application of the TTBER[314] and corroborating the increasing importance that these forms of multiparty licensing agreements have assumed in our economy.

As for the concrete application of the standards set forth in the Guidelines, it shall be reminded that they "must be applied in light of the circumstances specific to each case.[315] This excludes a mechanical implementation. Each case must be assessed on its own facts and the guidelines must be applied reasonably and flexibly".[316] This brings to mind the "rule of reason", previously examined when dealing with the American approach as set out in the US Antitrust Guidelines for the Licensing of Intellectual Property[317] and therefore it represents a point of conjunction with the US legal treatment of licensing agreement under the antitrust scrutiny.

311 Drexl J., "Is There a 'More Economic Approach' to Intellectual Property and Competition Law?", In: Drexl J. ed.: Research Handbook on Intellectual Property and Competition Law, Cheltenham, UK, Northampton, MA, USA, Edward Elgar, 2008, p. 31. On the same argument in the wider context of the TTBER, see: Drexl J., „Die neue Gruppenfreistellungsverordnung über Technologietransfer-Vereinbarungen im Spannungsfeld von Ökonomisierung und Rechtssicherheit", In: GRUR Int., 2004, p. 716 *et seq.*

312 *Id.,* Premise no. 7: "this Regulation should only deal with agreements where the licensor permits the licensee to exploit the licensed technology, possibly after further research and development by the licensee, for the production of goods or services. It should not deal with licensing agreements for the purpose of subcontracting research and development. It should also not deal with licensing agreements to set up technology pools, that is to say, agreements for the pooling of technologies with the purpose of licensing the created package of intellectual property rights to third parties".

313 Guidelines, *supra*, fn. 299, Sect. 4 "Technology pools", para. 210 *et seq.*

314 Pursuant to Art. 2 TTBER.

315 For the methodology for the application of Article 81(3) as set out in the Commission Guidelines on the application of Article 81(3) of the Treaty, see Joined Cases C-395/96 P and C-396/96 P, Compagnie Maritime Belge, [2000] ECR I-1365

316 Guidelines, *supra*, fn. 299, part I "Introduction", para. 3.

317 US Department of Justice and Federal Trade Commission, Antitrust Guidelines for the Licensing of Intellectual Property (IP Guidelines), April 1995, available at: www.usdoj.gov/atr/public/guidelines/ipguide.htm, Sec. 4 "General principles concerning the Agencies' evaluation of the rule of reason".

Under the general framework for applying Art.81 EC,[318] as clarified by the Guidelines, "The assessment of whether a licence agreement restricts competition must be made within the actual context in which competition would occur in the absence of the agreement with its alleged restrictions".[319] This also represents the point of departure for assessing the pro- and anti-competitive impact of technology pools, complementing the pragmatic reference to the state of affairs with the "rule of reason" and, thereby, effectively setting an indelible link to the concrete economic context in which such corporations arise.

Finally there shall be no "presumption of illegality" outside the safe harbour of the block exemption, thus it cannot be automatically assumed that technology transfer agreements falling outside the TTBER are caught by Article 81(1) or fail to satisfy the conditions of Article 81(3). Hence, an individual and unbiased assessment of the arrangement at issue shall operate on a case-by-case basis,[320] keeping in mind the ultimate goal of promoting innovation by maintaining the right balance between ensuring effective competition, on the one hand, and supporting economic initiatives and undertakings with an adequate level of legal certainty, on the other hand.

Technology pools are defined, for the scope of these Guidelines,[321] as "arrangements whereby two or more parties assemble a package of technology which is licensed not only to contributors to the pool but also to third parties". Although the statement at hand seems to give equal weight to both terms, the real emphasis is to be put on the second one, since the pivotal justification of a patent pool is the licensing of the contributed technologies to third parties in an aggregated form, to which the respective grants of rights within the pool is merely instrumental, as a possible choice for the internal organizational framework to be adopted, but certainly not essential to the achievement of the core pool's objectives.

Arguably, departing from a too formalistic definition, it shall be observed that a pool may as well effectively operate towards third parties independently from the fact that its members have or have not been granting each other mutual access to all pooled technologies, as long as the pool itself, acting as a "super partes", has been invested with the authority to conclude transactions as a legal entity on behalf of its associates. Therefore, this contribution rather adheres to the more concise and substantial definition, describing patent pools as consortia through which multiple patent owners offer third parties a joint non-exclusive license to access their patented technology, which will typically cover given technical applications.[322]

318 Guidelines, *supra*, fn. 299, part II "General Principles", Sect. 2 "The general framework for applying Art.81", papa. 11.

319 , [1966] ECR 337, and Case C-7/95 P, John Deere, [1998] ECR I-3111, para.76.

320 Guidelines, *supra*, fn. 299, part III "Application of the TTBER", Sect. 1 "The effects of the TTBER", para. 37.

321 *Id.,* Sect. 4 "Technology pools", para. 210, first sentence.

322 See, in this regard, the definition and concept expressed by Haller M. and Palim M. in "The Rise and Rise of Patent Pools", Intellectual Asset Management Magazine, October/November 2005, Issue 14, p. 9 *et seq.*

2. Questionable Demarcation of the Pool's Agreements between TTBER and Guidelines

As we have seen, patent pools as such are not covered by the TTBER, but are only addressed by the Commission Guidelines, which, although applying the same TTBER's principles by analogy, have no binding, but only "persuasive" authority, thus providing only a minimum of legal predictability. Consequently, the particular pooling agreement under consideration cannot benefit from a block exemption, but will keep on being exposed to the individual case-by-case assessment procedure, under the general competitions rules set out in Art. 81 of the EC Treaty.

Indeed, when attempting to respectively define the reach of the TTBER and the "residual competence" of the Guidelines, these trace a distinction between:

- On the one hand, pooling agreements as such, i.e. establishing technology pools and setting out the terms and conditions for their operation, which, irrespectively of the number of parties, are not covered by the block exemption. This is allegedly justified on the grounds that said arrangements do not directly aim at the "production of contract products",[323] namely products incorporating or produced with the licensed technology, thus not directly nurturing technological innovation. For these reasons such agreements do not "a priori" fall under the TTBER and are, consequently, deemed to be addressed only by the Commission Guidelines. The specific issues faced by pooling arrangements[324] - and not typically arising in the context of other types of licensing - would regard, in particular, (a) the selection of the technologies to be included and (b) the structural and functional operation of the pool.
- On the other hand, individual licences granted by the pool to third-party licensees are treated like other licence agreements, as if the pool was a single entity-patentee, which are block exempted when the conditions set out in the TTBER are fulfilled, with particular regard to the requirements of Article 4 of the TTBER containing the list of hardcore restrictions.[325] In fact there would be no reason to exclude such bilateral agreements just because one of the parties involved is the pool, acting in the quality of its representative, as an independent entity.

Thus, when referring to patent pooling agreements "as such" the Commission is deemed to allude to the above-mentioned first set of arrangements, i.e. the regulation of the respective rights and obligations inside of the pool, dealt with within the Guidelines. Conversely, all relations established towards third-party licensees, although to a certain extent predetermined in the context of the pool, may fall under

323 TTBER, *supra*, fn. 298, Art. 2 "Exemption"; Guidelines, *supra*, part III "Application of the TTBER", Sect. 2.2 "Agreements for the production of contract products", para. 41.

324 *Id.,* para. 212.

325 *Id.*

the TTBER, just like any bilateral agreement, here between the entity-pool (patentee) and the third party (licensee).

The exclusion of pooling arrangements from the Regulation's direct field of application - where the Guidelines explicitly state that: "Agreements establishing technology pools and setting out the terms and conditions for their operation are not, irrespective of the number of parties, covered by the block exemption"[326] - shall be read in conjunction both with the exemption set forth by Art. 2 of the TTBE. This latter dictates that "Art. 81 (1) of the Treaty shall not apply to technology transfer agreements entered into between two undertakings [first condition] permitting the production of contract products [second condition]" - and with Sect. III.2.2. of the Guidelines - further elucidating on what may fall under the definition of "agreements for the production of contract products" for the scope of the block exemption. Specifically, such point clarifies that, in order to be covered by the TTBER, the license must permit the licensee to exploit the licensed technology for the production of goods or services.

Nevertheless - while as far as the first requirement is concerned, it is perspicuous that patent pools may be excluded from the block exemption on the basis of the number of parties involved, if as is typically the case, more than two undertakings participate in the enterprise, and in account of the consequent probability of high combined market shares, typically exceeding the thresholds explicitly set forth in the TTBER[327] - the critical view is shared that the exclusion of a patent consortium on the basis of the scope of the agreement not meeting the requirement of the TTBER cannot be as easily justified.[328]

In fact, it is true that agreements establishing patent pools coincide with and presuppose, in the first place, the setting out of the terms and conditions for their operation, covering the reciprocal rights and obligations of the parties involved, but nevertheless such stipulations are inherently linked and indeed "instrumental" to the ultimate common goal of the exploitation of the pooled technologies for production of the contracted-product, by way of licensing with third parties. Hence, in practice, there is no "clear-cut" distinction between the prototype agreement establishing the pool and the subsequent bilateral contracts concluded with third parties, where the Guidelines shall assumedly strictly confine their scope of application to the former.

Besides, also wanting to adhere to the literal wording of the provision at issue[329] on the exclusion of "agreements establishing technology pools" from the benefits of the block exemption, referring to the setting out of the "terms and conditions for their operation" may (unintentionally but inevitably) well also encompass the pre-

326 *Id.*

327 Being said market-share thresholds set forth in Art. 3 of the TTBER.

328 For a complementary, but still critical stance on the matter, see *i.a.*: Ullrich H., "The Interaction between Competition Law and Intellectual Property Law: an Overview", European University Institute - Robert Schuman Centre for Advanced Studies, EU Competition Law and Policy Workshop, 2005, Introduction, p. 1 *et seq.*, available at: http://www.iue.it/RSCAS/Research/Competition/2005/200612-CompUllrichOVERVIEW.pdf

329 Guidelines, *supra*, fn. 299, Sect. 4 "Technology pools", para. 212, first sentence.

defined "licensing" terms that are going to be negotiated with third parties, which on the contrary may certainly be covered by the TTBER. Indeed, the consortium's provisions on the contractual terms to be applied to licensees represent the core business of the pool, as well as its means of self-subsistence, determining the flow of royalties to be respectively allocated to the pool contributors.

Therefore, the view is taken that a rigid separation, as proposed in the Guidelines, between agreements establishing technology pools, excluded by the block exemption, on the one hand, and the licensing terms to be included in third parties' negotiations, covered by the TTBER, on the other hand, although necessary for systematic purposes, in practice represents an artificial and somehow inefficient distinction, because the latter may partly overlap with the former, as the content of the transactions to be undertaken with licensees (such as the amount of royalties to be charges, the scope and duration of the contract, eventual additional clauses, like the right of termination in case of a challenge, and so on) is already substantially predefined in the pooling agreement itself.

In other words, to evaluate the antitrust compliance of a technology pooling arrangement, also individual licenses concluded with third parties - thus possibly falling under the TTBER - shall not be regarded in isolation, abstracted from their business context, but likewise appraised in the light of the overall principles set out in the Guidelines, where patent pools are portrayed in a more thorough manner, reflecting their actual economical weight and distinguishing character.

Besides, as regards other points, the same Guidelines seem to point in this direction, like for instance when laying out the Commission's criteria for the assessment of the overall competitiveness of a pool if the latter also encompasses complementary, but non-essential patents.[330] Here reference is made, in particular, to whether such technologies are available only as part of a single package or whether parties interested also have the option to negotiate a license only for part of the package, with corresponding reduction of royalties.[331] This specific condition, stipulated, among others, in the context of the pool, is necessarily also going to be reflected in the individual agreements concluded with third parties, which, in their turn, may be certainly covered by the block exemption, hence making the assumption of a net separation between the Guidelines and the TTBER's respective scope of intervention redundant.

330 *Id.*, para. 221 *et seq.*
331 *Id.*, para. 222, lett. d.

II. Antitrust Scrutiny of Technology Pools under the Guidelines

1. Nature of the Pooled Technologies: Substitutes v. Complements and the Concept of Essentiality

The most recurrently typified negative and positive effects of technology pools on competition, as outlined in the Guidelines, are closely linked to the respective relationships of the pooled technologies and may be summarized as follows:

- On the one hand, if substitute technologies are involved,[332] pooling agreements may first of all result in a restriction of internal competition among the pool's contributors because of the joint selling of the pooled patents, mischievously taken out from their natural competitive context in the marketplace.[333]

Indeed, a pool composed solely or predominantly of substitute, instead of complementary, applications, might dangerously resemble a "price fixing cartel". Moreover, when a technology pool supports an industry standard or establishes a "de facto" industry standard, in addition to diminishing competition between the parties, technology pools may also result in a reduction of external innovation by foreclosing alternative technologies, as the existence of the standard and the related technology pool may make it more difficult for new and improved technologies to enter the market.

- On the other hand, if constituted of complementary technologies,[334] pools may certainly also produce pro-competitive effects, in particular by reducing transaction costs and by setting a limit on cumulative royalties, thereby avoiding "double marginalisation".[335]

The latter notion typically delineates the double (or, in general, the multiple) mark-up, which firms involved in a multi-level production process respectively charge as the retail price to the subsequent purchaser in order to get higher "margins" of profit.[336] Therefore, if the distinct production stages are operated by differ-

332 For the scope of the TTBER, "substitute technologies" are defined as such "when either technology allows the holder to produce the product or carry out the process to which the technologies relate", Guidelines, *supra*, fn. 299, Sect. 4 "Technology pools", para. 216, 2nd sentence.

333 Guidelines, *supra*, fn. 299, Sect. 4 "Technology pools", para. 213.

334 For the scope of the TTBER: "Two technologies are complements as opposed to substitutes when they are both required to produce the product or carry out the process to which the technologies relate", Guidelines, *supra*, fn. 299, Sect. 4 "Technology pools", para. 216, 1st sentence.

335 Guidelines, *supra*, fn. 299, Sect. 4 "Technology pools", para. 214.

336 The phenomenon of "double marginalization" was first discussed in the early 19th Century by the French mathematician Cournot A. in: "Recherches sur les Principes de la of the Richesses", 1938, English edition: "Research into the Mathematical Principles of the Theory of Wealth", Edited by N. Bacon, New York: MacMillan, 1897. A more thorough analysis is to be found in Spengler J., "Vertically integration and Antitrust Policy, Journal of Political