Scheda dettagliata Catalogo SBN Ricerca: Autore = Castaldo, angelo > > Autore = castaldo, angelo & lt; 1975-> Scheda: 5/14 Livello bibliografico: Monografia Tipo documento: Testo a stampa Autore principale: Castaldo, Angelo <1975- > Nicita, Antonio Titolo: Essential facility access in Europe : building a test for antitrust policy. / Angelo Castaldo, Antonio Nicita Pubblicazione: California: Berkeley Electronic press, 2007 Descrizione fisica: 83-110 p.; 23 cm Note generali: abstract da: Review of law & economics, v.3 iss.1 Nomi: [Autore] Castaldo, Angelo <1975- > [Autore] Nicita, Antonio [scheda di autorità] Lingua di pubblicazione: INGLESE Paese di pubblicazione: STATI UNITI Codice identificativo:

IT\ICCU\RMS\1765006

Permalink:

http://id.sbn.it/bid/RMS1765006

Dove si trova:

RM0982 - RMS33 - Biblioteca del Dipartimento di scienze giuridiche. Sezione di economia e finanza dell'Università degli studi di Roma La Sapienza - Roma - RM

HELP

SCHEDA COMPLETA TROVATA SUL CATALOGO PERIODICI ACNP

PREFERENZE

55 52 20 50

Nuova Ricerca



uscita: html

Periodico/Rivista: *Review of Law & Economics

Editore Berkeley Electronic Press; Walter De Gruyter

Luogo pubbl.

Ultimo luogo pubblicazione:

Berlin

Da anno - Ad anno

2005
Lingua

ENG

Periodicità QUADRIMESTRALE

Paese DE

ISSN: 1555-5879 ISSN-L: 1555-5879

Cod. CDU: 34; 33

Dewey: 346.065340 340

Cod. CNR: PT02361523

Fonte TEMP

Supporto: On-line (remote)

Accesso Pubblico alla rivista: http://www.degruyter.com/view/j/rle

Posseduto cumulativo: 1995-

FULL TEXT Indici Doc Delivery

ABIS Area Biblioteche e Servizi allo Studio Università di Bologna

contatti

Informativa privacy - © Copyright CIB-Università di Bologna & CNR 2000-2010, ASDD-Università di Bologna & CNR 2015-2016, ABIS-Università di Bologna & CNR 2017

Essential Facility Access in Europe: Building a Test for Antitrust Policy¹

ANGELO CASTALDO,² ANTONIO NICITA³ *University of Rome, University of Siena*

This paper investigates the evolution of competition policy decisions in the US and, particularly, in the EU, concerning mandatory access to an essential facility held by a dominant firm. Based on some recent and controversial EU antitrust decisions, we outline a comprehensive test for identifying an essential facility and consequently imposing a mandatory access obligation on dominant firms.

1. INTRODUCTION

Mandatory access to a facility deemed essential in order for competitors to enter downstream markets, is one of the main regulatory measures as well as antitrust remedies implemented worldwide, and especially in Europe, as a result of the liberalization of markets in network industries previously covered by publicly-owned monopolists (Armstrong, Cowan and Vickers, 1994; Temple Lang, 1994).

The Essential Facility Doctrine (EFD) has long been debated in both the US and EU⁴ as an application of abuse of dominance as found in, respectively,

¹ A previous version of this paper has been presented at the European Association of Law and Economics 2005 conference, Ljubljana, Slovenia, 15-17 September. We would like to thank all of the participants of the 2005 EALE conference. We also thank for comments and discussions on the topic Pier Luigi Parcu, Giovanni Moglia, Alessandra Maria Rossi, Laura Ferrari Bravo, Peter Grajzl. Thanks also to Cristina Caffarra, Kai-Uwe Kuhn and two anonymous referees for their helpful comments. The usual disclaimers apply. We acknowledge financial support by REFGOV and MIUR research projects.

² University of Rome "La Sapienza" and CLEIS, Center for Law and Economics of Institutions, DEP University of Siena, Siena, Italy, castaldo@unisi.it

³ Dep. of Economics and CLEIS, Center for Law and Economics of Institutions, DEP University of Siena, Siena, Italy, nicita@unisi.it

section 2 of the Sherman Act and article 82 of the EU Treaty. The general principle of the EFD has been defined in the following way: "the owner of a properly defined "essential facility" has a duty to share it with others, and [...] a refusal to do so violates article 2 of the Sherman Act" (Hovenkamp, 1994:273). The essential facility doctrine thus addresses a particular case of abuse of dominance in the form of an illegitimate refusal to deal by a dominant firm (often denoted as a 'bottleneck monopolist') with the purpose of excluding competitors from the market. Refusal to deal also applies to behavior imposing unfair, excessive or discriminatory conditions on access (such as pricing, tying and so on), which in fact reduce or eliminate competition. When essential facilities are at stake, application of the EFD implies that competitors may gain the right to access essential facilities even without the consent of the owner, provided an appropriate compensation is transferred. According to the Calabresi and Melamed (1972) framework, this means that the essential facility doctrine affects the way in which some of the proprietary assets owned by a dominant firm are protected: once detected, essential facilities are protected by a liability rule rather than by a property rule (Werden, 1987).

However, though the general principle may be clear, the conditions that should be verified in order to transform a property rule into a liability rule are quite nebulous. As Hovenkamp (1994) outlines, the EFD is "one of the most troublesome, incoherent and unmanageable of bases" for cases of monopolization or abuse of dominance.

The EFD basically raises two main questions: (i) how to define the qualifying features of an essential facility; and (ii) how to balance mandatory access to an essential facility with protection of the exclusive use of property rights by dominant firms⁵ in such a way as to induce the efficient alignment of private incentives to invest and to innovate.

The problem here is that the questions above turn out to be very difficult to assess with certainty, placing competition policy at the border between antitrust law and regulatory design. The need to identify clear conditions for the application of the essential facility doctrine has been motivated (Gerber, 1988; Areeda, 1989; Lipsky and Sidak, 1999) by the high risk faced by an antitrust authority of making wrong or inappropriate decisions which might increase the number of competitors to the disadvantage of true incentives to invest and, ultimately,

⁴ According to the Commission of the European Communities, the question posed by the essential facility doctrine is that of "defining what is legitimate competition in the context of companies' duties to supply competitors and to grant access to essential facilities" (OECD, 1996).

⁵ That is the problem related with liability rules once the 'ex-ante view of the Cathedral' is taken into account by Bebchuk (2001).

consumer welfare. This is the main reason why Areeda and Hovenkamp (2003) have recently argued that "the essential facility doctrine is both harmful and unnecessary and should be abandoned," especially when the attributes of an essential facility are uncritically attached to intellectual property rights or to force competitor entry in aftermarkets (Pitofsky, Patterson and Hooks, 2002).

In this paper, we propose a comprehensive test aimed at providing some general criteria to distinguish between antitrust (ex-post) remedies against an abuse of dominance and regulatory (ex-ante) measures aimed at acting as a discipline device for an established dominant position. This distinction in turn sheds some light on possible different approaches—and procedures—between antitrust investigations regarding abuses of dominance, such as standard refusal to deal with customers and/or competitors, and those concerning denial of access to an essential facility.

The paper proceeds as follows. In section 2, we briefly recall the main arguments surrounding the antitrust debate concerning the essential facility doctrine in both the US and the EU. In section 3, we focus on four recent and controversial European antitrust decisions (Magill, Bronner, IMS, GVG/FS) which represent—in our view—different and contradictory attempts by the Commission, the Court of First Instance, and the Court of Justice to define and clarify the notion of essential facility abuses following article 82 of the EU Treaty. In section 4, we try to derive from the above decisions a unified framework, by outlining a test for defining an essential facility. Finally, section 5 draws the main conclusions.

2. MANDATORY ACCESS TO ESSENTIAL FACILITIES: THE EVOLUTION OF ANTITRUST DECISIONS IN THE US AND EU

In both US and EU antitrust law traditions, dominant firms are charged with a 'special responsibility' which imposes on them a special duty to abstain from making any decision which may—directly or indirectly—adversely affect the 'normal' competitive structure of the market in which the dominant position is held. Refusals to deal with competitors by dominant firms may constitute, under special circumstances, anticompetitive practices when the effect of the refusal is undoubtedly that of seriously harming market competition. Generally, refusal to deal has been judged an infringement of section 2 of the US Sherman Act or article 82 of the EU Treaty only when it has been coupled with other anticompetitive practices, such as tying and leveraging, or when it generated a discriminatory and selective boycott towards a 'dangerous' competitor.

Antitrust laws generally recognize the presumptive right of a dominant firm to refuse to deal with competitors, although they make clear that "such a right is not absolute; it exists only if there are legitimate competitive reasons for the refusal."6 The European Court of First Instance (CFI) declared that "under article [82] refusal to supply, even where it is total, is prohibited only if it constitutes an abuse," and also recognized "the importance of safe-guarding free enterprise when applying the competition rules." Accordingly, a refusal to supply oil to occasional customers has been evaluated by the European Court of Justice as a legitimate refusal to deal, due to the shortage imposed by the 1973 OPEC oil boycott.8 However, a corollary of the above principle is that the dominant firm that refuses to supply faces in any case the duty to provide an objective justification for its refusal, especially when the denial occurs in a business environment where dominant firms have in the past dealt with their competitors. In the next sections we briefly summarize the main antitrust decisions in the US and EU concerning the refusal to deal and provide essential facility access by dominant firms, outlining common features and the main differences between their respective antitrust policies.

2.1. ANTICOMPETITIVE REFUSAL TO DEAL WITH COMPETITORS: THE US APPROACH

Following Hovenkamp (1994), we can identify three main categories of refusals to deal under US antitrust law: (a) refusal to supply directed at competitors; (b) refusal involving vertical integration, tying and price constraints; and (c) refusal involving denied access to an essential facility (also see Blumenthal, 1989).

The two main principles emerging from the US approach are the following: (i) "a monopolist does not have a general obligation to cooperate with rivals," however (ii) "some refusals to deal may have 'evidentiary significance' and may produce liability in certain decisions" (Hovenkamp, 1994:264).

The first principle is also known as the *Colgato* principle and refers to the general idea that antitrust law should never be thought of as an argument against a monopoly in itself, but only versus the abuse of dominant position. Accordingly, since the pursuit of a monopolistic position should not be contradicted in itself by antitrust law, unless specific conditions of market monopolization apply, competition rather than cooperation with rivals should be the general mechanism which increases consumer welfare.

⁶ Eastman Kodak Co. v. Image Technical Services, Inc., 504 U.S. 451, 483 n.32 (1992).

⁷ Case T-41/96 Bayer A.G. v. Commission, Judgement 26 October 2000.

⁸ Case 77/77, BP v. Commission (1978) ECR 1513, (1978) 3 CLMR 174.

⁹ United States v. Colgate & Co., 250 US, 300, 307, 39 S. Ct. 465, 468 (1919).

The exception to this general rule applies to the special circumstance in which the refusal to deal affects market competition in an 'abusive' way. One of these circumstances, outlined by US antitrust decisions, refers to refusals to deal aimed at attempting to monopolize a downstream market through leveraging strategies and vertical integration, as in the famous *Kodak*¹⁰ case in 1927. In *Kodak*, the defendant was a dominant firm manufacturing camera film and photographic materials. Kodak had been in the practice of selling its products to all independent distributors. After the decision to vertically integrate with several distributors, Kodak refused to continue selling also to independent distributors, thus generating a serious harm to them, given that for independent distributors Kodak was a 'must-have' brand. This conduct has been classified as an illegal attempt to monopolize under the Sherman Act. However, the Kodak case raised an articulate debate¹¹ concerning the application of the 'special responsibility' of dominant firms to aftermarkets too.

The first case explicitly involving a refusal to provide access to an 'essential facility' in the United States was that of a concerted collective boycott, U.S. v. Terminal Railroad Association. 12 In this case, the Court decided that an association by a group of railroads controlling all of the bridges and connections from and towards St. Louis constituted an illegal restraint of trade and an attempt to monopolize against competing railroad services. A concerted refusal to provide access to an essential facility was also investigated in Associated Press, 13 where the decision by an association to provide its copyrighted news service only to its members was interpreted as an anticompetitive refusal to deal. Another milestone case of anticompetitive refusal to provide access to indispensable assets is the Lorain¹⁴ case. There, a locally dominant newspaper, which was the only outlet for newspaper advertising, refused to accept ads from firms which were also placing advertisements on radio. In another case, Otter Tail Power, 15 the Supreme Court condemned the refusal by a public utility to distribute power to municipal utility companies which were also acquiring power from other alternative sources. In some cases, the anticompetitive refusal to deal by a dominant firm has been a commercial choice which reduced competitors' residual demand, as in Aspen Skiing, 16 where the dominant firm refused to agree

¹⁰ Eastman Kodak Co. v. Southern Photo Materials Co., 273 US 359, S. Ct. 400 (1927).

¹¹ See Hovenkamp (1994) for a summary of the debate.

¹² United States v. Terminal Railroad Association, 224 US, 383 (1912).

¹³ Associated Press v. United States, 326 US 1 (1945).

¹⁴ Lorain Journal Co. v. United States, 342 US, 143, 146-49, 156 (1951).

¹⁵ Otter Tail Power Co. v. United States, 410 US 366, 93 S. Ct 1022 (1973).

¹⁶ Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 US 585 (1985).

with a competitor on continuing to provide customers with a comprehensive ticket that had previously induced skiers to also use the competitor's facilities.¹⁷

The most important case for the definition of the notion of an essential facility and for the application of the essential facility doctrine is the *MCI*¹⁸ case, in which a monopolist telecommunications provider was forced to provide access to its local service network to competitors in long-distance calling. In this case, four elements for delineating the essential facility doctrine have been outlined: (1) the essential facility is controlled by a monopolist; (2) a competitor is unable to practically or reasonably duplicate the essential facility; (3) access to the facility is denied to a competitor (including those cases in which access is provided but conditioned on the imposition of unjustifiably high and/or discriminatory prices); and (4) access is technically and economically feasible. We will analyze in the next sections the economic rationale surrounding the conditions outlined in *MCI*.

2.2. ANTICOMPETITIVE REFUSAL TO DEAL WITH COMPETITORS: THE EU APPROACH

As Jones and Sufrin have outlined (2001), European jurisprudence has identified several anti-competitive strategies enacted by dominant firms in refusing to deal with competitors (see Jones and Sufrin, 2001; Lang, 1994): (a) refusal to supply a product in order to exclude competitors from ancillary markets; (b) refusal to supply in response to an explicit attack on the dominant undertaking's commercial interests; (c) refusal to supply spare parts; and (d) refusal to supply in order to exclude competitors from downstream markets. Even if only the last issue refers to decisions explicitly concerning essential facilities, some of the standard cases of refusal to deal might be easily reconsidered as cases of denial of access to an essential facility.

In *Telemarketing*,¹⁹ Luxembourg television stopped accepting advertisements for telemarketing unless the phone number used was from its own subsidiary. The Commission and the Court of Justice both found an abuse of dominant position in which refusal to deal was realized through a tying practice, by "an undertaking holding a dominant position on the market in a service which is *indispensable*²⁰ for the activities of another undertaking on another market."

 $^{^{17}}$ As Pitofsky et al. (2002) outlined, a central issue in Aspen was that the refusal to deal constituted a sudden change from previous practice followed by the dominant firm.

¹⁸ MCI Communications v. AT&T Co., 708 F.2d 1081, 1132-33 (7th Cir. 1983).

¹⁹ Case 311/84 Centre Belge d'Etudes du Marché-Telemarketing v. Compagnie Luxembourgeoise de Telediffusion Sa and Information Publicité Benelux Sa (1985) ECR 3261, (1986) 2 CMLR 558.

²⁰ Emphasis added.

Commercial Solvents²¹ is a crucial decision for the evolution of the notion of the essential facility in European antitrust. The case refers to a firm (CSC) supplying aminobutanol through its Italian subsidiary to a company, Zoja, which used aminobutanol as a raw material to obtain ethambutol, further used as a basic component for pharmaceutical products. Zoja, having found cheaper suppliers, suspended its orders from CSC for a period, but after that attempted to turn back to its original supplier, CSC, which-at this point- refused to deal, having meanwhile decided to change its business and production strategies. The Commission and the Court of Justice declared that CSC's behavior was, in fact, an abuse of dominant position. The Court specified that "an undertaking being in a dominant position as regards to the production of raw materials and therefore able to control the supply to manufacturers of derivatives, cannot, just because it decides to start manufacturing these derivatives (in competition with its former customers) act in such a way as to eliminate their competition." In Commercial Solvents we also find the first explicit statement by the Commission involving the epithet 'essential facility': "a dominant undertaking which both owns or controls and itself uses an essential facility, i.e. a facility or infrastructure without access to which competitors cannot provide services to their customers, and which refuses its competitors access to that facility or grants access to competitors only on terms less favorable than those which it gives its own services, thereby placing the competitors at a competitive disadvantage, infringes Article [82], if the other conditions of that Article are met. A company in a dominant position may not discriminate in favor of its own activities in a related market (...) without objective justification." In particular, the Commission added that in cases in which the competitor is already subject to a 'certain level of disruption' from the dominant undertaking's activities "there is a duty on the dominant undertaking not to take any action which will result in further disruption. That is so even if the latter's action make, or are primarily intended to make, its operations more efficient."

In both *Telemarketing* and *Commercial Solvents*, the refusal to deal was directed towards a product or service that was somehow deemed to be an essential facility, since denying access in those cases would have inhibited competition in the principal or an ancillary market. However, a refusal to deal may also be judged as abusive when enacted through selective unilateral boycotts towards a

²¹ Cases 6, 7/73 Istituto Chemioterapico Italiano Spa and Commercial Solvents Corp. v. Commission (1974) ECR 223, (1974) 1 CMLR 309.

client who was attacking the dominant firm's commercial interests by starting to purchase products from a competitor, as in the *United Brands*²² case.

In the *Hugin*²³ case, the Commission argued that the refusal to supply spare parts by a dominant firm may constitute an abuse in the market for own spare parts even if the firm in question does not hold a dominant position in the primary market. The idea followed by the Commission is that independent firms in the market for spare parts (for single or multi-branded business) need access to spare parts in order to enter the market. As in the *Kodak* case in the US recalled above, this conclusion appears to be misleading in several respects, since it identifies every firm with an aftermarket as a dominant firm therein. This implies a dangerous misunderstanding about the potential efficiency of intra-brand restrictions in aftermarkets and of the interplay between intrabrand restrictions and the pro-competitive effects induced in inter-brand competition.

The position of the Commission in refusal to deal cases concerning access to an essential facility has evolved over time since *Telemarketing* and *Commercial Solvents*, as shown by subsequent decisions such as *British Midland/Aer Lingus*,²⁴ *Sealink/B&I Holyhead*,²⁵ *Sea Containers Ltd./Stena Sealink*,²⁶ *Port of Rodby*,²⁷ *Port of Roscoff*,²⁸ *Magill*,²⁹ *European Night Services*,³⁰ *Oscar Bronner*,³¹ *IMS*,³² *and GVG/FS*.³³ However, the evolution of the notion of essential facility and of the associated dominant firm's duty to provide access, far from being linear and coherent, has ultimately generated a huge debate, especially when the notion of essential facility is also applied to intellectual property rights. In the next section, we analyze in detail four recent cases which contain, in our view, contradictory claims about dominant firms' duty to share access to an essential facility.

²² Case 27/76 United Brands v. Commission (1978) ECR 207, (1978) 1 CMLR 429.

²³ Lipton Cash Registers/Hugin (1978) OJ L22/23, (1978) 1 CMLR D19.

²⁴ [1992] OJ L96/34.

²⁵ [1992] 5 CMLR 255.

²⁶ [1994] OJ L15/8.

²⁷ [1994] OJ L55/52.

²⁸ [1995] 5 CMLR 177.

²⁹ RTE & ITP v. Commission [1995] ECR I-743.

³⁰ European Night Services v. Commission [1998] ECRII-3141.

³¹ Case C-7/97 Oscar Bronner GMBH & CO. KG v. Mediaprint [1998] ECR I-7791.

³² NDC Health/IMS Health: Interim measures (COMP D3/38.044-Antitrust) [2003] ECComm 61 (13 August 2003).

³³ GVG/FS (COMP/37.685) [2003] ECComm 64 (27 August 2003).

3. THE ERRATIC APPROACH OF EUROPEAN ANTITRUST AUTHORITIES: COMPARING FOUR CASES

In this section we summarize four recent European antitrust cases which contain very different formulations of the essential facility concept. In particular, we show that European antitrust has followed a quite erratic approach in defining the cumulative conditions which need to be verified in order to qualify as an abuse of dominance in the form of a refusal to share access to a facility deemed as essential to enter a downstream market.

3.1. MAGILL³⁴

Magill TV Guides Ltd. was an Irish publisher that started a weekly TV guide containing the programs of RTE, BBC and ITP. Until then, each broadcasting company had published its own TV weekly magazine reporting information relating only to their own channel listings. The three 'publishers' (RTE, BBC and ITP) obtained an injunction from the Irish High Court to prevent Magill's publication on the basis of the legal principle that the information published was covered by copyright, being 'literary works.' The Irish High Court decided in favor of the plaintiffs, and Magill complained to the European Commission that the refusal to deal by the TV broadcasters was, in fact, an abuse of dominance, in violation of article 86 (now article 82) of the EC Treaty. The Commission argued that the concept of essential facility was also applicable to intellectual property rights under particular circumstances and that the TV companies were each dominant on the market for their own weekly listings and, therefore, that their opposition to Magill's publication of a comprehensive TV guide was an abuse of dominance. In particular: (i) it prevented the introduction of a new product for which there was a significant consumer demand; (ii) dominant firms used their power-through a litigation strategy based on the presumptive infringement of a copyright-to retain for themselves the derivative market for weekly guides, thus 'limiting production or markets to the prejudice of consumers'; (iii) the mere existence of a legal protection for existing rights-such as copyright-was not a sufficient argument to avoid the application of article 82 of the Treaty, when the intellectual property right constitutes an essential facility for entering the TV guide market and it is used to stop a rival from introducing a new and improved product in that market. Consequently, the Commission ordered RTE, BBC and ITP to end the infringement by providing, upon request and on a non-discriminatory basis,

³⁴ RTE & ITP v. Commission [1995] ECR I-743. For an analytical comment on the Magill decision, see Anderman (1998).

TV listings information to interested third parties for their publication. The European Court of Justice (ECJ) upheld the Commission and the CFI decisions, outlining that "the exercise of an exclusive right by the proprietor may, in exceptional circumstances, involve abusive conduct." These special circumstances were identified in the following six fact findings: (i) the absence of actual or potential substitutes for a weekly television guide; (ii) the existence of a 'specific, constant, and regular potential demand on the part of customers'; (iii) the circumstance that RTE, BBC and ITP were "the only source of the basic information on program scheduling" which was the "indispensable raw material for compiling a weekly television guide;" (iv) the refusal by RTE, BBC and ITP 'to provide basic information by relying on national copyright provisions prevented the appearance of a new product;" (v) 'there was no justification for such a refusal either in the activity of television broadcasting or in that of publishing television magazines;" (vi) RTE, BBC and ITP 'by their conduct reserved to themselves the secondary market of weekly television guides by excluding competition on that market since they denied access to the basic information which is the raw material indispensable for the compilation of such a guide.'

3.2. Bronner³⁵

Oscar Bronner constituted, after the Magill judgment, another path-breaking case in which the ECJ defined and applied the essential facilities doctrine. In particular, it regarded a refusal to deal by Mediaprint, a dominant publisher of newspapers in Austria, which established the only nationwide system for newspaper home delivery. The refusal was related to Mediaprint's denial to also distribute the newspaper published by Bronner (a newspaper with only local diffusion and minor audience). Mediaprint was actually distributing not only its own newspapers, but also an independent newspaper, for which it also provided printing and distribution services in addition to home delivery. Oscar Bronner published a daily newspaper that reached about 3.6% of the newspaper market share in Austria and had more or less 6% of total newspaper advertising revenue. On the other side, Mediaprint, the largest daily newspaper provider group in Austria, published two daily newspapers and represented 47% of the newspaper market share and 42% of advertising revenues.

Mediaprint opposed Bronner with a refusal to provide home delivery of Bronner's daily newspapers through Mediaprint's distribution system on the basis of market price remuneration. Bronner claimed that Mediaprint's refusal represented an abuse of dominant position, since Bronner was unable, given its

³⁵ Case C-7/97 Oscar Bronner GMBH & CO. KG V. Mediaprint [1998] ECR I-7791.

small circulation, to arrange and provide for its own home delivery service through alternative economically sustainable delivery systems.

The Court upheld the Opinion of Advocate General³⁶ Jacobs, stating that access to a facility could only be granted if, integrating Magill's 'exceptional circumstances,' two specific conditions were satisfied: (i) the refusal to deal should have the ability to foreclose competition in the relevant market; and (ii) the facility should be 'indispensable to the carrying on of the business of the person requesting the service.' About indispensability, the Court further specified that it occurs: (a) when there are no plausible alternatives to the facility, even considering inferior quality ones; and (b) when the impossibility of duplicating the facility is objective, due to 'technical, legal or economic obstacles' of a representative operator and not due to the limited capacities of the specific new potential entrant. As a result, a mere economic disadvantage or less convenient input alternative with respect to the position held by the dominant firm is not sufficient to identify an essential facility. In determining whether a facility is essential, the antitrust agency should not tailor the cost of building an alternative facility, or search for alternative facilities to the specific capacity of the particular competitor that is currently requiring access. Preferably, the antitrust agency should refer to the 'equilibrium' situation of a 'representative' efficient competitor who is endowed with the 'normal' abilities (economic, commercial, technological) required for conducting that business in an efficient way. Thus, only when a facility is essential, such that the mere fact of denying access to it would result in a total elimination of actual and potential

³⁶ In its opinion to the Court, Advocate General Jacobs clarified that "the right to choose one's trading partners and freely to dispose of one's property are generally recognized principles in the law of the Member States, in some cases with constitutional status. Incursions on those rights require careful justification." Moreover, according to Jacobs, "the purpose of article [82] is to prevent distortion of competition [...] rather than to protect the position of particular competitors." Consequently, refusal of access may entail an abuse of dominance only when there is a serious risk of 'permanent exclusion' from the market in which the "dominant undertaking has a genuine stranglehold" so that "access to a facility is a precondition for competition on a related market for goods or services for which there is a limited degree of interchangeability." This is the case if "duplication of the facility is impossible or extremely difficult owing to physical, geographical or legal constraints [...]. It is not sufficient that the undertaking's control over a facility should give it a competitive advantage." On the other hand, "if the cost of duplicating the facility alone is the barrier to entry, it must be such as to deter any prudent undertaking from entering the market." Finally, Jacobs outlines that when access is forced by antitrust decision "the undertaking [...] must be fully compensated by allowing it to allocate an appropriate proportion of its investments costs to the supply and to make an appropriate return on investments having read to the level of the risk involved." In applying these conditions to the Bronner case, Jacobs concluded against the claimant, arguing that many alternative possibilities, even if less convenient, were available to Bronner to deliver its product.

competition.³⁷ Summarizing, the ECJ decision listed four factors according to which the refusal to share a facility would result in an abuse (see Jones and Sufrin, 2001:416): (1) the refusal should produce the effect of eliminating all competition in downstream markets; (2) the refusal should lack any economic justification; (3) access must be indispensable in order to enter downstream markets for any representative competing firm; and (4) there must be no actual or potential substitute for the asset to which access is required.

3.3. GVG/FS³⁸

In the *GVG* case, the Commission reversed somewhat the criteria outlined above in *Bronner*. GVG was a German railway undertaking, while *Ferrovie dello Stato S.p.A.* ("FS"), the principal and publicly-owned Italian railway operator.³⁹ In its complaint, GVG stated that FS had abused its dominant position by refusing to negotiate the constitution of an international grouping with GVG,⁴⁰ to grant access to the Italian railway infrastructure, and to agree to provide traction services. GVG claimed⁴¹ that FS was abusing its dominant position in violation of article 82 of the Treaty and of the principal norms of Directive 91/440, by refusing to provide access to the Italian railway market.

With particular reference to the refusal to provide traction services, GVG claimed that the provision of traction services by FS (now Trenitalia) was indispensable in order to provide rail transport service in the downstream market. In order to carry out the service, GVG requested that FS negotiate the

³⁷ The *Bronner* decision has been criticized for being too restrictive in some respects (Treacy, 1998; Hancher, 1999).

³⁸ Commission Decision of 27.08.2003 (COMP/37 .685 GVG/FS).

³⁹ From the 13th of July 2001, FS was restructured into a holding company, with FS-Holding S.p.A. controlling, in particular, two companies Rete Ferroviaria Italiana S.p.A. (RFI) (the infrastructure manager) and Trenitalia S.p.A. (the incumbent railway undertaking). The transformation from public to private entity (100% publicly-owned) took place between 1992 and 1993; the new organizational form in Holding with the separation between the company that operates the network (RFI S.p.A.) and the one that operates the transportation services (Trenitalia S.p.A.) took place in 2001.

⁴⁰ An international grouping is defined by Council Directive 91/440/EEC on the development of the Community's railway as an association of at least two railway undertakings established in different member states.

⁴¹ GVG was pursuing the project of accessing the Italian railway market in order to provide an international railway passenger service from various points in the south of Germany to Milan via Basel. In particular, the service would have transported passengers into Basel and then to Milan through Domodossola, offering a service that would have competed with Cisalpino–a joint-venture entity between FS and Swiss railway operators. On this segment, GVG's service was to be direct in order to attract business customers by offering a non-stop Basel-Milan connection that would have been one hour faster than other existing links.

traction service (e.g., locomotive, drivers), including all of the back-up that was necessary to ensure punctuality, reliability and continuity of the service.⁴² On the other side, FS argued that defining traction assets and services as essential facilities was economically inappropriate as it would in the long run generate inefficient incentives to invest for the incumbent. Moreover, FS underlined that in case of shortages in the incumbent capacity to provide traction service, the obligation to provide a wholesale offer to a competitor, and thus to share with them existing capacity, would have been equivalent to imposing a constraint of the incumbent's ability to satisfy consumer demand. In conclusion, FS argued that the traction assets were not an essential facility given that alternative sources of supply were available for new entrants.

In its final decision, the Commission recognized three different forms of abuse of dominant position by FS: the refusal to grant access to the Italian infrastructure network; the refusal to join in an international grouping; and the refusal to provide traction. The Commission examined whether any existing European railway undertaking had available any concrete and feasible alternatives for renting traction from undertakings other than FS on the Domodossola-Milan route. The Commission, as a result of its analysis, stated that no feasible alternatives were possible, due to the high cost of buying new locomotives for a new entrant. Since FS (Trenitalia S.p.A.) was the only railway undertaking able at that time to provide GVG with such traction service, the refusal to provide resulted in an unjustified abuse of dominant position, having the effect of foreclosing competition in the downstream passenger transportation market. Before the Decision was adopted, FS (Trenitalia S.p.A.) and FS (RFI S.p.A.) submitted undertakings aimed at settling a traction contract with GVG.

3.4. IMS^{43}

The IMS case constitutes an attempt to merge the lessons coming from *Magill* and *Bronner*. The analysis followed by the Commission and ECJ in *IMS* further elaborates on the concept of essential facility, and leaves as an open issue whether such an approach should be considered applicable to every property right, and specifically whether it should be referred to intellectual property. IMS Health is a pharmaceutical database company, holding a copyright over a

⁴² The locomotive to be used must meet a quality requirement and be fully operational. In this particular case, GVG required that FS provide an electric locomotive "sprinter" capable of at least 160 km/hour.

⁴³ NDC Health/IMS Health: Interim measures (COMP D3/38.044-Antitrust) [2003] ECComm 61 (13 August 2003).

specific data format. IMS collects data from pharmaceutical companies in a way that specifically fits the technical requirements of its format. As a consequence, the IMS format has quickly come to constitute a sort of standard in the pharmaceutical industry. In particular, IMS provides data on regional sales of pharmaceutical products in Germany to pharmaceutical laboratories, formatted according to a brick structure consisting of 1860 bricks corresponding to a designated geographical area and containing several codes. Since IMS not only marketed its brick structures, but also distributed them free of charge to pharmacies and doctors, these brick structures became the standard for the industries. Some competitors of IMS in Germany, namely NDC and AnZyx, asked for a license to enter the market for the sale of pharmaceutical data. Upon refusal by IMS, these competitors started producing a database with a slightly modified format, thereby inducing IMS to sue NDC and AnZyx for violation of copyright law.44 IMS obtained from the Frankfurt District Court an injunction against competitors, and also a decision by the Court to forward some questions to the ECJ. Meanwhile, NDC complained to the Commission that the refusal by IMS constituted in fact an abuse of dominance. The Commission in 2001 decided in favor of NDC against IMS,45 ordering (due to evidence of 'exceptional circumstances') interim measures, such as the granting of a license to use the 1860 brick structure to all undertakings active in the market for provision of German regional sales data, in order to prevent a foreclosure capable of eliminating all competition in the market. IMS appealed to the CFI. While the case was still on appeal, a German Court ruled that the IMS competitors could create their own system of analysis using the underlying administrative and postal data that was the basis of the IMS format. Accordingly, the CFI suspended the Commission's order⁴⁶ on the basis that there were actual and potential substitutes for the copyrighted format, and that access to it was not indispensable. The ECJ confirmed CFI's decision,⁴⁷ inducing a final withdrawal decision by the Commission.⁴⁸ Parallel to the case started before the European Commission, another process was activated by the Frankfurt Court which referred questions to the ECJ⁴⁹ on the application of article 82. The opinion delivered by Advocate General Tizzano

⁴⁴ Case C-418/01, ECR 2004, p. I-5039.

⁴⁵ European Commission Decision 2001/165/EC, COMP D3/38.044, OJ L. %), 28.02.2002, pp. 18-49.

⁴⁶ Court of First Instance, Case T-184/01 R ECR 2001 II-03 193, 26 October 2001.

 $^{^{47}}$ Case C-481/01 P(R) ECR 2002 I-03401. This case was thus parallel to case C-418/01. For a clear description of the timeline and interdependencies between the two cases, see Le (2006).

⁴⁸ Decision 2003/7417EC, OJ 1 268, 18.10.2003, pp. 69-72.

⁴⁹ Case C-418/01, ECR 2004, p. I-5039.

and the final judgment of the Court further elaborated on Magill and Bronner. First, the Court established that network effects and switching costs from the demand side ("the degree of participation by users in the development of [the brick] structure" and "the outlay, particularly in terms of costs, on the part of potential users") matter for deeming indispensable-in terms of the alternative available to competitors from the supply side-the license in order to enter the downstream relevant market. Secondly, the Court outlined four conditions (in addition to the pre-condition that the asset or license needs to be indispensable) that should be satisfied in order for the refusal to grant the license by IMS to be an abuse of dominance in violation of article 82: (1) the undertaking which requested the license intended to offer on the downstream market new products or services not offered by the (copy)right owner; (2) there was a potential consumer demand for this new product; (3) the refusal was not justified by objective considerations; and (4) the refusal was such as to reserve to the (copy)right owner the downstream market by eliminating all competition in that market.

3.5. SUMMING UP

The four cases summarized above show several attempts to define the conditions for mandatory access to an essential facility. While the *IMS* case seems to trace a very restrictive view for defining an essential facility, the access to which is indispensable for entering downstream markets, the *GVG* case substantially defines an essential facility (i.e., locomotives) as an access that is necessary to encourage short-term entry in the downstream market. Several points need to be clarified in the above decisions:

- a) the 'new product' condition in *Magill* and in *IMS*;
- b) the question of appropriate compensation for investments made by the facility owner, (also with reference to the intersection between antitrust and intellectual property laws) as faced in *Magill, Bronner*, and *IMS*;
- c) the indispensability condition for the facility outlined in Bronner; and
- d) the role played by the notion of 'incumbent's excess capacity' as implicitly pointed out in GVG.

Both *Magill* and *IMS* refer to the question of mandatory access to an asset protected by an intellectual property (Nicita, Ramello and Scherer, 2005; Gilbert, Gallini and Trebilcock, 1998). This specific feature has generated an additional condition for a rival requesting access to a facility, which was generally absent from the traditional debate and, thus, from the list of factors outlined in the *MCI* case

recalled in section 2. This new condition is that a rival's purpose of selling at the retail level must be a 'new' product or service not currently offered by the owner of the facility, and for which there is at least a potential demand. This requirement was absent in Bronner and in GVG. It was also absent in previous decisions regarding access to intellectual property rights or to copyrighted works, as in Commercial Solvents. The economic rationale surrounding this new requirement is nonetheless problematic: it refers to a new retail product for which there is at least a potential demand, but it is not clear in either Magill or IMS whether this new product is to be offered in the same downstream relevant market in which the owner of the facility holds a dominant position or in another new relevant market. If the new product identifies a new relevant market with respect to the downstream market where the owner of the facility maintains a dominant position, then it is not clear in our view why-from an economic point of view—this condition needs to be coupled with that requiring, as an effect of the refusal, the elimination of competition ('all competition' in the IMS decision) in the retail relevant market served by the owner of the facility. If the new product is offered in another downstream relevant market, the refusal should not produce any effect in the existing downstream market. Moreover, if the demand served by the new product pertains to another relevant market, we should not expect in principle any 'crowding-out' effect on the demand served by the owner of the facility. As a consequence, any fear of ex-post hold-up negatively affecting-through mandatory access-the owner's expected profits on the retail market is unjustified. From a consumer welfare perspective, access to a facility with the purpose of selling goods or services which are not in direct competition with those offered by the facility owner but rather are destined to cover a demand not already satisfied, would result in a clear Pareto-improving configuration. As a result, the cumulative conditions raised in Magill and Bronner appear to lose their economic justification.

On the other hand, in the case of a new product that is offered in the same downstream relevant market already served by the owner of the facility, what seems to be relevant is simply the ability of the new entrant to compete on an equal and fair basis against the incumbent. In this respect, the existence of a 'residual' demand for the entrant's product will depend on the relative efficiency of the new entrant, which may or may not be related to its ability to introduce innovation or reduce prices. As Ridyard (2004) outlined, if the entrant is able to provide existing customers with the same product as the incumbent, but at lower prices (because, for instance, he is more efficient than the incumbent in avoiding some delivery or organization costs), that means that there is a potential demand to be served independent of any consideration regarding the novelty of the product. Moreover, this would be exactly one of

the possible cases in which a refusal to share the facility by the incumbent would have the effect of eliminating competition and maintaining the dominant position in the existing market to the detriment of consumers. It should not be surprising in this respect, that the Bronner decision, in rejecting the plaintiff's claim while referring explicitly to Magill, nonetheless did not mention as a distinguishing condition for qualifying an essential facility the novelty of the product to be sold in the downstream market. On the other hand, the Bronner decision focuses on the issue, raised in both Magill and IMS, of granting appropriate returns to the investments made by the facility owner. Advocate General Jacobs in the Bronner opinion clearly states that in the case of forced access "the undertaking must however [...] be fully compensated by allowing it to allocate an appropriate portion of its investment costs to the supply and to make an appropriate return on its investment having regard to the level of risk involved."50 In this respect, in order to achieve this result there is no need to recur to the 'new product' condition, neither is it necessary to outline any difference between standard property rights and intellectual property rights (see Nicita, Rizzolli and Rossi, 2005): the access (wholesale) price⁵¹ should reflect the costs sustained by the owner and should not be confused with the level of profits associated with downstream monopolistic positions.

Bronner raises some doubts on the notion of the 'indispensability' of the facility to which access is required, actually a crucial concept outlined in the decision. The idea behind the decision is that the costs of building an alternative facility should not be tailored to the small dimension of a new entrant with limited market share, but should instead be calculated with reference to a 'real' competitor able to gain at least the same share as the incumbent. As Bergman (2000) has pointed out, there should be no confusion between the objective dimensions of normal barriers to entry in a given market, which also determine the minimum efficient scale, and short run costs incurred by operators with a small entry scale. In this respect, GVG constitutes a dramatic reversal of Bronner's conditions, given that even a small operator has the right of access to the incumbent's locomotives. Now, when excess capacity in the incumbent's availability of locomotives perfectly matches with the specific requirements of the competitor, mandatory access cannot distort

⁵⁰ Case C-7/97 Oscar Bronner GMBH & CO. KG V. Mediaprint [1998] ECR I-7791.

⁵¹ Economic theory has suggested a wide range of access pricing techniques in order to ensure market efficiency. Among these, it is worth noting: short run marginal costs - SRMCs (Kahn, 1988); long run incremental costs - LRICs (Baumol, 1983; Brown, 1986; Berg and Tschirhart, 1988); efficient component pricing rule (ECPR) or Baumol-Willig rule (Willig, 1979; Baumol, 1983; Baumol and Sidak, 1994a, 1994b); Ramsey pricing (Ramsey, 1927); two-part tariff (Gans, 2001); and rate of return regulation – ROR (Averch-Johnson, 1962).

competition. However, if the duty to provide access were to result in shortages for the incumbent, this would be a controversial outcome of the application of the essential facility doctrine that contrasts with the general principle of legitimate refusal to deal in the case of shortages, as outlined also in *BP vs. Commission*.⁵² A forced and permanent mandatory access in this case would probably distort the 'make or buy' decisions at the origin of the business model (Coase, 1937; Williamson, 1985; Baker, Gibbons and Murphy, 2001).

With a capacity constraint, the social opportunity cost of a new entrant obtaining an input from the incumbent is the cost of obtaining a new asset. This means that the opportunity cost for the incumbent to provide access is the incremental cost of the additional capacity which needs to be procured in order to serve its own needs. But, unless it is cheaper to expand existing capacity than to create a new one, this should be the full incremental cost of expanding capacity, which is the same for the incumbent as for the entrant. Thus, the imposition of an obligation to provide the whole service would probably reduce dramatically the incentive to upgrade the technology of the existing stock of locomotives, thereby dissipating any competitive advantages that may derive from investing in technological innovation if competitors were to appropriate any amelioration. From an economic point of view, an essential facility can only exist when it is not possible for a new entrant to generate sufficient revenues to cover the incremental cost of providing the service without having access to the incumbent's input. This means that it is necessary to ascertain whether the new entrant would be able to break even by replicating the asset–a test that the Commission failed to verify in the GVG/FS case.

4. BUILDING A TEST FOR THE APPLICATION OF THE ESSENTIAL FACILITY DOCTRINE

In this section we propose a test for the application of the essential facility doctrine that takes into account, in a coherent way, the main lessons to be drawn from the evolving US and EU jurisprudence on the notion of essential facility, and try to overcome the doubts raised by previous decisions.

We propose a test in five steps (Durante et al., 2001) to identify the required factors:

- (i) Dominant position of the facility owner in downstream markets;
- (ii) Unjustified and effective refusal to deal
- (iii) Feasibility of shared access;

⁵² Case 77/77, BP v. Commission (1978) ECR 1513, (1978) 3 CLMR 174.

- (iv) Essentiality of the facility;
- (v) Non-duplicability of the facility.

These steps are intended to be cumulative and should be hierarchically fulfilled.

- (i) Dominant position of the facility owner. The first step is a crucial one. Here dominance should refer not only to the 'market of the facility' but also to the market position of the facility owner in 'affected' downstream relevant markets (Kahn, 1992). It is self-evident that if downstream markets are competitive, this means that access to the facility in question should not be considered a barrier to entry, and thus a refusal to deal should not be deemed abusive. On the other hand, if a dominant position is held by the facility owner in downstream markets, then a refusal to grant access to the facility may generate a market foreclosure or a strategy of raising rivals' costs. The first step thus tells us that if a dominant position cannot be found in downstream markets, then access to the essential facility is a virtually non-existent problem, since there is not a functional relationship between competition in the related market and access to that input.⁵³
- (ii) Unjustified and effective refusal to deal. The second step is registering that an 'effective' refusal to deal has occurred for which there are no economic justifications. The refusal to deal should here refer both to a real refusal and to an indirect refusal generated through an excessive price. Moreover, 'effective' should here mean a refusal generating the effect of foreclosing downstream markets. As a standard of proof, this means that plaintiffs should be able to provide evidence of the effects generated by the owner's refusal. On the other hand, the refusal (or the price proposed by the owner) should be unjustified. Analysis of the economic justifications for opposing a refusal to deal in our view coincides with the third step outlined below, which is based on the idea of investigating the feasibility of shared access.
- (iii) Feasibility of shared access. In this third step, the underlying idea is that of analyzing not only the determination of a 'reasonable' price for access (covering maintenance and incremental costs), but also the economic

⁵³ The existence of several competitors also means that there is an upstream market for the facility, unless incumbent firms build an anticompetitive cartel or unless the final product to be offered by the rival requiring access needs several complementary inputs, as in *Magill*. As we have outlined above, the case of secondary markets or aftermarkets requires some further consideration: in order for a competitor in a secondary market to have access to the facilities necessary to operate, it should be the case that the owner of an essential facility is a dominant firm in the primary market.

and technical degree of rivalry in the use of the facility determined by providing access to competitors. Here, this means that the application of a *liability rule* should never impair the sovereignty of the owner, i.e. the expected value of the essential facility use in a competitive environment (for instance, the owner of a facility should not face any shortage in providing for its own customers due to the shared access arrangement).

- (iv) Essentiality of the facility. The fourth step is much simpler, since it requires only that the degree of essentiality of an asset be ascertained. This means determining whether having access to a facility dramatically affects the value of the final product or service generated through that access. An asset may be deemed essential for several reasons, but being essential in this particular sense is not sufficient to impose mandatory access on the asset owner. Essentiality here means, as in Bronner, 'indispensability,' meaning that it is not possible to produce the output without access to the facility. On the other hand, to be 'indispensable' does not mean that the asset is unique or non-duplicable, which is the last condition outlined by the test.
- (v) Non-duplicability of the facility. In our test, we reach this fifth step only when all of the other conditions above have been satisfied: the owner of the facility has a dominant position in the downstream market, her refusal has been effective and unjustified, shared access to the asset is feasible, and the asset is essential to enter the downstream market. The notion of non-duplicability somewhat recalls the notion of uniqueness of the facility. Of course, the asset may be non-duplicable in an absolute sense (because of physical or technical restraints) or in a relative sense (due to market structure, minimum efficient scale, switching costs, incumbent's competitive advantage, and so on). In this latter case, nonduplicability could be motivated not only by natural monopoly conditions (costs sub-additivity) (see Breautigam, 1989; Sharkey, 1982), but also by insufficient returns on investments destined to create an alternative facility by a representative competitor. The latter is a complex condition, because it applies to cases in which potentially the asset is duplicable, but the market structure is such that the dominant firm, which has already sunk its investment in building the facility, may use actual supracompetitive margins to activate short-term price wars, or target rebate policies (not necessarily predatory prices, but limit pricing subject to the margins obtainable by new entrants investing in alternative facilities). In this case, as the Bronner decision outlined, antitrust authorities should consider not simply the start-up costs of a generic new entrant, but

should parameterize such costs to the minimum efficient dimension of a long-term operator in the market (otherwise every entrant in any market may define incumbent assets as non-duplicable facilities). This means that it is necessary to ascertain whether the new entrant is able to break even by replicating the asset. Thus, if the entrant can cover its incremental costs, it will enter the market whether the incumbent provides the input or not. As a result, entry cannot be strategically preempted by denying access to the input. This is the reason why in our test the notion of duplicability includes the conditions outlined in Magill, Bronner and IMS regarding the elimination of all competition from a downstream market should access to the input be denied. Hence, the incumbent should provide the input whenever it is efficient for him to do so, because he can then extract some of the efficiency gains of providing the existing facility (the alternative is to face entry by competitors without however extracting any benefit). In particular, suppose it were possible to set up the facility and provide the service, with the expected revenue exceeding the incremental cost: the new entrant will then be able to enter the market, and the incumbent will have an incentive to share his input with the entrant-thus allowing him at least to get a margin on the input, as opposed to the benefit from the purchase of the asset being entirely appropriated by someone else. Even if the asset in question was a natural monopoly, i.e. the average costs of providing the service using that asset decline over the whole range of output, it will still not constitute an essential facility if the cost of providing the service independently does not exceed the expected revenue from the additional downstream service (Kuhn et al., 1996). In these cases, imposing a mandatory access would produce an inefficient outcome (Boldron and Hariton, 2001).54

In conclusion, if a new entrant is able to break even by replicating the asset, there can be no issue of essential facility: any entrant who is able to break even will find entry attractive, and strategically refusing access would not effectively protect the incumbent from competition.

More generally, an "essential facility" can only arise if it is socially less costly to provide the service on the existing asset than to invest in duplicating the

⁵⁴ Of course, the above argument implies a different treatment of the essential facility doctrine in cases of abuse with respect to mergers. This argument also explains why an increasing number of mergers have been authorized under the condition that temporary access to essential facilities would have been provided to new entrants in order to allow them to reach the minimum efficient scale necessary to build their own facility.

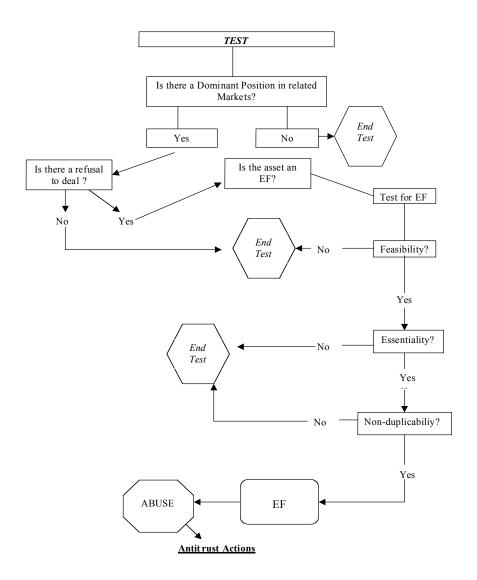
asset. This will occur in one of two cases: either because the asset has certain natural monopoly characteristics arising from economies of scale and scope, or because the investment cost of the asset has already been sunk, and therefore the ex-post avoidable cost of the input is much lower than the incremental cost of providing it. But there can never be an essential facility when the new entrant is able to cover the incremental cost of setting up the service (and in these circumstances there is an incentive for the incumbent firm to trade and come to an agreement on access to the asset).

The above argument, coupled with that on the potential shortage imposed on the incumbent, leads to the following conclusion: if an entrant could not directly meet the incremental cost of the investment in a new asset, it would also be unable to break even when charged the correct opportunity cost by the incumbent. In other words, the social opportunity cost of the incumbent dedicating an asset for use by the entrant would be the cost of a new locomotive. However, if that is too high for the entrant to break even in the first place, then he should also not be able to break even if the asset is sourced from the incumbent—his scale of entry is just inefficient, as clearly stated by the Court in the *Bronner* case, and/or the expected performance of the business to be started by the new entrant is not so attractive in the first place. The risk here is that the essential facility doctrine would result in incumbent subsidization of inefficient entry.

When all the above five steps are fulfilled, as in figure 1, then the asset is an essential facility and the denial of access to it constitutes an infringement of article 82 of the Treaty (section 2 of the Sherman Act), since it would reduce the competitive race in related markets, thus harming consumer welfare.⁵⁵

⁵⁵ However, there is another case which needs a more complicated analysis: the owner of an essential facility has not yet entered a downstream market (thus the first step is not fulfilled), but refuses to give access to the facility to a competitor who wishes to enter. Here, a crucial point in imposing compulsory access and/or in condemning as abusive such a conduct seems to be investigating the intent of the owner with respect to future entry in related markets.

FIGURE 1. A Test for the Application of the Essential Facility Doctrine



5. CONCLUDING REMARKS

As Temple Lang (1994) has recently outlined, the European antitrust approach is characterized by a consistently greater number of interventions regarding abuse of dominance than those cases in the US. In Temple Lang's view, this is the tangible result of the different paths of economic, legal and institutional evolution between US and European states, the latter being characterized in the past decades by a pervasive role of public governance and ownership of monopolistic firms in network industries. The wave of liberalization and privatization processes, which has deeply characterized European countries in the 1990s, has been accompanied and sustained by competition policies enacted by independent authorities such as regulatory bodies and antitrust agencies, both at the national and at the European level. Since most network industries (telecommunications, media, electricity, railways, postal service, etc.) in European countries are still characterized by dominant firms, competition policies against the abuse of dominance and dominant positions have been pervasive in Europe.⁵⁶ Regulatory and antitrust interventions have been, and still are, crucial in determining and maintaining competitive dynamics against abuse of dominance by firms controlling essential facilities. Kezsbom and Goldman (1996), among others, have critically argued against what they see as the 'regulatory' attitude of European antitrust in disciplining dominant positions by setting remedies aimed at encouraging entry and competitors, rather than exclusively focusing on consumer welfare. This continuing debate has been further stimulated by evidence that European institutions (the Commission, the Court of First Instance, the Court of Justice) seem to have followed over time a quite erratic approach to both the question of the abusive qualification of a refusal to share an essential asset by a dominant firm, and the consequent specification of the conditions for mandatory access to an essential facility. From one side, there has been an attempt to rigorously define those 'exceptional' circumstances which impose limits on the ownership rights possessed by dominant firms, confirming the general principle that even a

⁵⁶ In the last fifteen years, the European economies have been largely affected by regulatory reforms aimed at introducing competition in markets where the existence of essential facilities constituted an insuperable barrier to entry, such as telecommunications, electricity, gas, railways, the postal sector, and so on (Shleifer, 1998). Consequently, this process has also induced European and national regulatory authorities to build systems of control over pricing access to essential facilities, often imposing accounting, company, or proprietary vertical separation to vertically integrated incumbents.

dominant firm should not be obliged to share its property rights with its competitors; from the other side, the question of imposing mandatory access to assets owned by a dominant firm has often been extended beyond the 'exceptional circumstances' principle, being interpreted as a general remedy against dominance when technological or economic constraints from the supply or demand side inhibit a short-term credible threat by competitors to the established dominant positions.

As Ridyard (2004) has outlined, the latter approach could be defined as one promoting competitor access to 'convenient' rather than to 'essential' facilities, defining a convenient facility as "an asset without access to which it would be jolly inconvenient for rivals because they would need to offer customers a better product in order to overcome the advantages of the incumbent." Convenient facilities are assets which, even being potentially duplicable by rivals, generate a short-term insuperable barrier to entry due to network effects or to a large minimum efficient scale in the industry, such as a standard technology (interface information in Microsoft) or popular TV programs (broadcast packages on NewsCorp/Telepiii) (Nicita and Ramello, 2005). The European Commission has also been very active in adopting this approach in anticompetitive mergers with regard to network industries and intellectual property rights or joint ventures. In particular, in several cases the Commission authorized clearance only after undertakings were assumed by the merging firms to provide non-discriminatory access to the existing or newly created convenient facilities.

In this article, we have outlined some common features and several differences in the evolution of US and EU antitrust approaches used in cases concerning refusal to share access to an essential facility. While in the US the standard rule seems clearly to refer to the *MCI* four conditions, in Europe some recent decisions offer a quite erratic and often contradictory approach. We have particularly analyzed four recent cases—*Magill, Bronner, GVG*, and *IMS*—all of which differ in several important respects.

The test herein proposed tries to integrate under a unified framework the conditions outlined in previous EU decisions. Building on the evolution of refusal to deal with competitors in cases involving essential facilities both in the US and EU, with a particular emphasis on some recent and controversial European cases, we have proposed a comprehensive test aimed at: (i) defining an essential facility; and (ii) identifying the conditions for antitrust intervention when refusal to provide access results in an abuse of dominant position.

We argued in favor of a prudential attitude towards the application of the essential facility doctrine along the lines followed by the Commission in the *Bronner* case, while suggesting some 'caveats' on the notion of non-duplicability

envisaged in that decision. We have also shown that in some cases the notion of non-duplicability could be extended so as to encourage short-term entry, but only if the other conditions of essentiality and feasibility are satisfied. The GVG and IMS cases follow two opposite directions in this respect.

References

- Affuso, L. 2003. "Il servizio ferroviario nell'esperienza Britannica e internazionale," 5(1) Mercato concorrenza regole 99-116.
- Anderman, S. 1998. EC Competition Law and Intellectual Property Rights: The Regulation of Innovation. Clarendon Press, Oxford.
- Areeda, P. 1989. "Essential Facility: An Epithet in Need of Limiting Principles," 58

 Antitrust Law Journal 841.
- _____ and H. Hovenkamp. 2003. Fundamentals of Antitrust Law, 2003 ed., vol. I-II. New York: Aspen Publishers.
- Armstrong, M., S. Cowan, and J. Vickers. 1994. Regulatory Reform: Economic Analysis and British Experience. Cambridge: MIT Press.
- Averch, H., and L.L. Johnson. 1962. "Behavior of the Firm under Regulatory Constraint," 52(5) *American Economic Review* 1053-1069.
- Baker, G., R. Gibbons, and K. Murphy. 2001. "Bringing the Market Inside the Firm?," 91(2) *American Economic Review* 212-218.
- Baumol, W.J. 1983. "Minimum and Maximum Pricing Principles for Residual Regulation," in A. Danielsen and D. Kamerschen, eds. Current Issues in Public Utility Economics.
- _____ and J.G. Sidak. 1994a. "The Pricing Inputs Sold to Competitors," 11 Yale Journal on Regulation 171-202.
- _____ and _____. 1994b. Toward Competition in Local Telephony. Cambridge, MA:
- Berg, S.V., and J. Tschirhart. 1988. *Natural Monopoly Regulation: Principles and Practice*. Cambridge University Press.
- Bergman, M.A. 2000. "The *Bronner* Case A Turning Point for the Essential Facilities Doctrine?" 21(2) *European Competition Law Review* 59-63.
- Bebchuck, L.A. 2001. "Property Rights and Liability Rules: The Ex Ante View of the Cathedral," 100 Michigan Law Review 601-639.
- Boldron, F., and C. Hariton. 2001. "Vertical Relationship and Regulation: The Case of Essential Facility," 52(3) Revue Economique 655-664.
- Blumenthal, W. 1989. "Three Vexing Issues Under the Essential Facilities Doctrine: ATM Networks as Illustration," 58(3) *Antitrust Law Journal* 855-870.
- Braeutigam, R.R. 1989. "Optimal Policies for Natural Monopolies," in R. Schmalensee and R. Willig, eds. (1990), *Handbook of Industrial Organization*. North-Holland.
- Brown, S.J. 1986. The Theory of Public Utility Pricing. Melbourne: Cambridge Univ. Press.
- Calabresi, G., and A.D. Melamed. 1972. "Property Rules, Liability Rules, and Inalienability: One View of the Cathedral," 85 Harvard Law Review 1089.
- Coase, R.H. 1937. "The Nature of the Firm," 4(16) Economica 386-405.

- Durante, E.D., G. Moglia, and A. Nicita. 2001. "La nozione di essential facility tra regolamentazione ed antitrust. La costruzione di un test," 2001(2) Mercato Concorrenza Regole 257-292.
- Gans, J.S. 2001. "Regulating Private Infrastructure Investment: Optimal Pricing for Access to Essential Facilities," 20(2) *Journal of Regulatory Economics* 167-89.
- Gerber, D.J. 1988. "Note: Rethinking the Monopolist Duty to Deal: A Legal and Economic Critique of the Doctrine of 'Essential Facilities,' "74 Virginia Law Rev. 1069.
- Gilbert, R.J., N.T. Gallini and M.T. Trebilcock. 1998. "Intellectual Property Rights and Competition Policy: A Framework for Analysis of Economic and Legal Issues," in R. Anderson and N.T. Gallini, eds. *Competition Policy and Intellectual Property Rights in the Knowledge-Based Economy*. University of Calgary Press.
- Hancher, L. 1999. "Case Law: A. Court of Justice Case C-797, Oscar Bronner v. Mediaprint," 36(6) Common Market Law Review 1289-1308.
- Hovenkamp, H. 1994. Federal Antitrust Policy: The Law of Competition and its Practice. St. Paul, MN: West Publishing Co.
- Jones, A., and B. Sufrin. 2001. EC Competition Law: Text, Cases and Materials. Oxford University Press.
- Kahn, A.E. 1988. The Economics of Regulation: Principles and Institutions. MIT Press.
- ______. 1992. "Market Power Issues in Deregulated Industries," 60 Antitrust Law Journal 857-866.
- Kezsbom, Allen, and Alan V. Goldman. 1996. "No Shortcut to Antitrust Analysis: The Twisted Journey of the 'Essential Facilities' Doctrine," 1996(1) *Columbia Business Law Review* 145.
- Kuhn, K., C. Caffarra, and D. Maldoom. 1996. "Designing Competition Policy Towards Essential Facilities," paper presented at CEPR workshop on 'Recent Developments in the Design and Implementation of Competition Policy,' Florence, 29-30 November 1996.
- Lipsky, A.B., and J.G. Sidak. 1999. "Essential Facilities," 51(5) Stanford L. Rev. 1187-1248.
- Le, N. 2006. "Intellectual Property Protection for Non-Innovative Markets: The Case of IMS Health," 2(1) Erasmus Law and Economics Review 87-98.
- Nicita, A., and G. Ramello. 2005. "Exclusivity and Antitrust in Media Markets: The Case of Pay-TV in Europe," 12(3) *Int'l Journal of the Economics of Business* 371-387.
- ______, M. Rizzolli, and M.A. Rossi. 2005. "IP Law and Antitrust Law Complementarity. When Property Rights are Incomplete," paper presented at 2005 ISNIE conference, September 22-24, Barcelona.
- OECD. 1996. "The Essential Facility Concept," OECD/GD(96)113, Organisation for Economic Co-Operation and Development, Paris.
- Parcu, P.L. 2004. "The Dominant Position and its Abuse: Suggestions from Game Theory," SIMPLE, Siena Memos and Papers in Law and Economics, n. 22.
- Pitofsky, R., D. Patterson, and J. Hooks. 2002. "The Essential Facilities Doctrine under U.S. Antitrust Law," 70 *Antitrust Law Journal* 443-461.

- Ramsey, F. 1927. "A Contribution to the Theory of Taxation," 37 Economic Journal 47-61.
- Ridyard, D. 2004. "Compulsory Access under EC Competition Law A New Doctrine of 'Convenient Facilities' and the Case for Price Regulation," 25(11) European Competition Law Review 669-673.
- Sharkey, Y.P. 1982. The Theory of Natural Monopoly. Cambridge University Press.
- Shleifer, A. 1998. "State versus Private Ownership," 12(4) J. of Economic Perspectives 133-150.
- Temple Lang, J. 1994. "Defining Legitimate Competition: Companies' Duties to Supply Competitors, and Access To Essential Facilities," 18 Fordham International 437.
- Treacy, P. 1998. "Essential Facilities Is the Tide Turning," 19(8) European Competition Law Review 501-505.
- Werden, J. 1987. "The Law and Economics of the Essential Facilities Doctrine," 32 St. Louis U. Law Journal 433.
- Williamson, O. 1985. The Economic Institutions of Capitalism. Free Press.
- Willig, R. 1979. "The Theory of Network Access Pricing," in H.M. Trebing, ed. *Issues in Public Utility Regulation*. East Lansing: Division of Research, Graduate School of Business Administration, Michigan State University.