Son yıllarda Avrupa Topluluğu (AT) rekabet otoriteritelerince zorunlu unsur doktrini rekabet hukukunun sınırlarını aşarak fikri ve sınaî hakları da içine alacak şekilde uygulanmaya başlanmış ve böylesine geniş bir uygulama rekabet hukuku eliyle fikri mülkiyet alanına müdahalenin ne derece gerekli olduğuna yönelik haklı bir tartışmayı da beraberinde getirmiştir.

Klasik olarak doktrin üst pazarda hakim durumda olan bir teşebbüsün alt pazardaki bir rakibine o pazarda faaliyette bulunabilmesi için zorunlu olan bir faaliyeti sağlamaktan kaçınması halinde uygulanmakta olup böyle bir durumda hâkim durumundaki teşebbüsün reddi Avrupa Topluluğu Antlaşması'nın 82. maddesinin ihlaline sebebiyet vermekte, ihlalin giderilmesi ise ancak hâkim durumdaki teşebbüsün zorunluluk niteliği taşıyan unsura geçiş tahsis etmesiyle mümkün olmaktadır.

Kusurdan arî gözüken bu tablo zorunlu unsurun fikri mülkiyet hukukunca korunması halinde karmaşıklaşmakta bunun temel sebebi olarak da üst pazarda hakim durumda olan teşebbüsün zorunlu lisanslama eliyle alt pazardaki rakipleriyle fikri ve sınaî haklarını paylaşmaya zorlanmasının kısa vadede üst pazarda rekabeti arttırsa bile, uzun vadede fikri mülkiyet hukukunun amacı olan yenilikçi çabanın teşvikini azaltması gösterilmektedir.

İki rejim arasındaki bu gözle görülür çarpışma; bir yandan piyasadaki rekabeti istenilen düzeyde tesis ederken, diğer yandan fikri ve sınaî hak sahiplerinin mağduriyete uğratmayacak olan koşulların nasıl oluşturulabileceğinin araştırılması gerektiğine işaret etmektedir.

Bu çalışmanın amacı AT rekabet hukukunun bu güncel sorununu, Avrupa içtihat hukukundan ve doktrindeki farklı görüşlerden yararlanarak irdelemek ve her iki rejiminde istikrarlı ve sağlıklı bir şekilde işleyeceği olası koşulları saptamaktır. Çalışmanın genelinde Avrupa Toplulukları Adalet Divanı'nın önce Magill ve ardından IMS davalarında vermiş olduğu kararların bahsi gecen koşulların kusursuz olmasa da doğru seçiminin ve istikrarlı uygulamasının fermanı oluşu ortaya konmuş; ancak Komisyonun Microsoft davasında aldığı karar ile mevcut yerleşikliğin alt üst edildiği gözler önüne serilmiş ve rekabet hukukuyla fikri mülkiyet hukukunu ortak ve kalıcı bir paydada birleştirebilecek çözüm önerilerine yer verilmiştir.

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1 INTRODUCTION

The application of the so-called 'essential facilities doctrine' (hereinafter 'EFD') to cases involving intellectual property rights (hereinafter 'IPRs') has heated the debate as to what extent it is desirable for the EC competition authorities to intervene in the realm of intellectual property (hereinafter 'IP') law.

The concept of essential facilities first appeared in the US anti-trust practices and became established in the European Community (hereinafter 'EC') competition law in order to deal with the cases in a time when liberalization was prevalent. While it can be invoked under Article 81 EC as well as the free movement provisions of the Treaty, most of the cases are examined under Article 82 EC as a sub-category of 'refusal to deal' cases. Indeed, the general principles of the doctrine look considerably similar to those of the classic refusal to deal theory. Yet, the existence of a possibility to draw distinctions between the principles of these two doctrines suggests that the similarity is not at the level of 'being identically the same'.

In generic terms, the doctrine applies when a dominant undertaking in an upstream market refuses to supply a facility to a downstream competitor for which the facility is essential to operate in that market. In such a case, the refusal violates Article 82 EC and a duty to grant access to the essential facility is imposed on the dominant undertaking. This picture gets complicated where the essential facility falls within the protection of IP law in that forcing the dominant undertakings to share their IP rights, in the form of compulsory licensing, with their rivals, even if increases competition in the short run, reduces what IP law aims to increase, namely the dominant firm's incentives to innovate. Therefore, at first glance there is a serious clash between two regimes. Indeed, this was the dominant view until the 1970s and accordingly the competition authorities did not feel any discomfort in invoking the essential facilities concept in dealing with intangible property cases to the extent that the conflict concerned the exercise of IPR rather than the existence of it. This early understanding however, has been replaced by a modern understanding acknowledging the special features of these rights, and the important role they played in the new economy as well as the negative impacts of compulsory licensing on the creativity of the right holder, which would, in the long run, distort the competitiveness of the market. It was, therefore, emphasized that caution is required in imposing compulsory licensing.

The conditions of compulsory licensing remained unclear until the introduction of the ‘‘exceptional circumstances’’ test by the European Court of Justice (hereinafter ‘ECJ’) in the groundbreaking *Magill* case. In the early days, the *Magill* ruling was seen as being almost the end of the world, by reason that it, far too readily provided intervention on the behalf of the competition agencies. Later on, it was clarified that the best approach was to recognize *Magill* only on its own facts. However, the ambiguity surrounding the judgment had opened the doors for subsequent cases to play around with the *Magill* conditions.

In *Ladbroke* the Court of First Instance (hereinafter ‘CFI’) had adopted a narrow interpretation of the EFD and therefore a general framework had begun to be formed. The ECJ in *Bronner* went further by distinguishing, even if implicitly, the IP cases from the tangible property cases. In *IMS*, the *Bronner* distinction has been clarified by the ECJ and the *Magill* conditions have been restated in a clear manner. Despite a series of unresolved issues, the outer limits of the doctrine in relation to the IPRs were made far clearer than is under the earlier case law.

The hard-established certainty in this area has been negated with the recent Commission decision (as confirmed by the CFI) in *Microsoft* case, which was delivered only one month before the *IMS* judgment. It has raised serious concerns, as to the lack of a definite consensus in literature on the application of the doctrine in IP cases and as to the insufficient legal and economic analysis of the complex market conditions in dealing with cases involving high technology. A bigger concern has been that in the *Microsoft* ruling is more akin to the traditional refusal to supply principles rather than the EFD.

The apparent inconsistency in the case law on refusal to license makes it impossible to predict what would be the fate of the future IP cases, particularly those arising out of the technology conflicts.

The subject of this thesis is to determine how a balance should be sought that maintains the beneficial aspects of each regime. It should be noted that the study is limited to the applications of the doctrine under Article 82 EC and the requirements other than abuse which will trigger the application of Article 82 is not reviewed.

The paper is divided into four parts. In the first part, the uneasy relationship between the exclusivity granted by IP law with the competition rules regulating abuse of the dominant position is scrutinized. In part II, the emergence of the EFD in the EC context and the refusal to supply cases that constitute the origins of the doctrine are reviewed briefly. In Part III, (i) the early refusal to license cases of *Volvo v. Veng* and *CICRA v. Renault*, (ii) the exceptional circumstances test of the leading case *Magill* and (iii) the case law post-*Magill* are analyzed with particular emphasis on (iv) the recent cases of *IMS* and *Microsoft*. In Part IV, both in the light of the Commission's Discussion Paper Article 82 and the examinations made in the previous parts, the suggested solutions of the relevant problems are set forth.

2 THE ISSUE OF INTERFACE BETWEEN IP and EC COMPETITION LAW

The EC literature concerning the essential facilities concept, involves a number of references to the problematic relationship between IP and competition law.

It is unquestionable that at first glance, these two regimes appear to sit ill with one another. Competition law has as a primary objective of the maintenance of open markets, while seeking to avoid any barriers, which will distort the competition in the relevant markets, and to promote competition, which will be of benefit to consumers. IPRs, however, serve to confer an exclusive capacity to behave in given ways upon their holders that will ''act as a reward for innovation''. Thus, it has the potential to dissolve what the former tries to achieve.

The prevailing view in the 1980s was premised upon this prima facie tension. It had been submitted that when analyzed ex-post, refusal to license reduces allocative efficiency by reducing competition in the short run. Therefore, these rights were regarded as exceptions of competition law and accordingly construed in a narrow manner. The only restraint on the EC competition authorities' freedom of intervention to IP law had been that they could only judge the anticompetitive exercises of IPRs, but not the existence of them.

Following the 1980s, the view that sees both regimes in conflict with each other had been abandoned. The relationship between two regimes has, particularly when analyzed ex ante, revealed that there would be no investment in future innovations unless the recoup for investment is guaranteed by a mechanism. This issue becomes much more important in relation to pharmaceuticals and high technologies where requires high-level investments to be made.

These examinations, in the EC context, has led to the adoption of an understanding that sees two regimes as complementing each other on the basis that both regimes are concerned with the promotion of innovation in markets even though their means of achieving this end differs. Thus, it is made clear that the true path to follow is to focus on the similarities and try to reconcile the differences. However, it soon became apparent that in the context of the EFD, the tension between two regimes is evident and the issue of balancing the IPRs with the competition principles turns into a complex task.

3 ESSENTIAL FACILITIES DOCTRINE

3.1 General Background

The EFD had been introduced into the EC competition law in a time when deregulation was prevalent. It is mostly examined as a sub-category of refusal to deal type of conducts, which fall within the scope of Article 82 EC, which deals with the abuse of dominance. However, neither the refusal to deal nor the essential facilities concept appears in the non-exhaustive list of abusive behaviors provided by Article 82. Therefore, determination of application principles of the EFD in the EC context greatly depends on the court decisions, particularly those dealing with refusal to supply conducts.

2 Origins of the Doctrine; Traditional Refusal to Supply Theory

In the EC context, there are three key cases by which the general principles regarding refusal to supply are set forth.

The first one is the ***Commercial Solvents*** case, which concerns the termination of a dominant upstream player to supply a raw material (amino butanol) to a downstream player (Zoja) based on its decision to enter the downstream market (etambutol market). The ECJ, while accepting the possibility to produce etambutol by using different raw materials, considered this possibility utopic in the competitive structure of the 1970s. Then, it concluded that refusal to supply an existing customer constitutes an abuse under Article 82 (ex Article 86) where it ‘‘risks eliminating all competition on the part of this customer’’. This indicates the adoption of a stance that the protection of the individual competitors is more privileged than the protection of competition as a whole.

The other case is the ***United Brands***, which deals with the refusal by United Brands (a dominant company) to supply Olesen (its Danish distributor, not a competitor) based on Olesen's attendance to the advertisement campaign of rival firms. In this case, the ECJ held that the upstream dominant undertaking cannot cease to supply to its ‘‘long standing customers’’ in the absence of any abnormal circumstances. The crucial difference with *Commercial Solvents* is that the ECJ defined the scope of duty to deal, broadly by imposing it without a need to demonstrate the existence of an essential facility.

In ***Telemarketing*** case, the ECJ refined its judgment in *Commercial Solvents.* It held that the dominant firm's (RTL) termination to supply a service, which is indispensable to operating in downstream market, with the intent to reserve the market to itself and ‘‘with the possibility of eliminating all competition from such undertaking” if ‘‘not justified by technical or commercial’’ means*,* violates Article 82. Therefore, the Court introduced the concept of indispensability and clarified the condition of objective justification by subjecting it to technical and commercial constraints. Furthermore, the Court implicitly raised the threshold for the elimination of competition in that RTL's refusal will definitely result the elimination of competition in the relevant market.

The principles established by the earlier cases on refusal to supply, if not strictly, were premised on by the EC competition authorities in identifying the boundaries of the essential facilities concept.

3.3 The Emergence of the Doctrine in the EC Context

In the EC context, the EFD was exported from the US antitrust practices in order to regulate certain industries in a period of liberalization. Not surprisingly, the first cases in which Commission has invoked the doctrine were related to transportation sector such as ports and airlines, displaying natural monopoly characteristics. Nonetheless, it was not until the case of ***B&I***

v. Sealink in 1912 that the Commission had explicitly used the phrase of ‘‘essential facilities’’. In this case, the Commission shed some light on the concept of essential facility by stating that

“a dominant undertaking which both owns or controls and itself uses an essential facility, without 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 favourable than those which it gives its own services, thereby placing the competitors at a competitive disadvantage, infringes Article 82(ex. Article 86), if the other conditions of that Article are met. A company in a dominant position may not discriminate in favour of its own activities in a related market without objective justification.

The Commission, after its finding of abuse of dominance based on the classical refusal to supply doctrine (indispensability, objective justification, and refusal), imposed a special duty on the essential facility owner (Sealink) to be non-discriminative and reasonable in its conducts with existing customers.

In the subsequent case of ***Stena Sealink***, the application of the doctrine had extended to cover the refusals to grant access to the new competitors along with the existing ones. This extension had been confirmed in the subsequent port case called ***Port of Rodby*** as well as in the air transport cases of ***Sabena*** and ***British Midland/AL***.

3. 4 A Comparative Analysis of Refusal to Supply and Essential Facility Cases

The above-made analysis suggests that it is possible, if not clear-cut, to make a differentiation between the EFD and the traditional refusal to supply theory.

First, refusal to deal/supply cases concern the conduct of ‘‘leveraging market power from one market to another’’ whereas the EF cases concern a ‘‘structural problem’’, which results the imposition of compulsory access to the essential asset. Second, there is no distinction drawn between existing competitors and new entrants in the essential facility cases and third, they are investigated in a fiercer manner in that the duty to grant access may arise where the ‘‘indispensability criterion’’ is not satisfied and even where there is no abusive conduct.

Arguably, the presence of an essential facility is a strong instrument for the EC competition authorities to deal with the cases that do not fit within the classical scenario for refusal to supply. This highlights the need to be clear about the limits of the doctrine, especially when taken into account that the doctrine has begun to be invoked in refusal to license cases.

4 THE APPLICATION OF THE ESSENTIAL FACILITIES DOCTRINE in IP CASES

4.1 Early Cases on Refusal to License

The general principles governing the refusal cases involving IPRs are set forth in the earlier cases of ***Volvo v. Veng*** and ***CICRA v. Renault*** , both of which concern the refusal to license by the dominant enterprises, of the industrial design right on spare parts to aftermarket competitors with the aim to reserve this market for themselves. The ECJ in both cases made the point that the competition policy neither concerned with the existence of the IPRs nor the ''normal exercise'' of the IPR which constitutes the ''very subject matter'' of the IPR . Moreover, it indicated that refusal to license cannot ''in itself'' be regarded as an abuse of dominance, ''even in return for reasonable royalties''. Nonetheless, it added that ''certain abusive conducts'' may violate Article 82 and provided a non-exhaustive list in order to shed some light on what might be these special types of abusive conducts.

The ECJ has clearly adopted a less interventionist stance in dealing with cases involving IPRs. However, in both cases, it has failed to provide clear guidance as to the circumstances under which a refusal to license would be against Article 82 and by providing a non-exhaustive list of abusive conducts; it has set the ground for subsequent case law in this particular context.

2 The Leading Case of *Magill*

The ''exceptional circumstances'' under which a duty to license may arise under Article 82, are identified by the four-prong test, introduced in the famous ***Magill*** case.

The case concerns the refusal to license by the Television ('TV') companies of Broadcasting Corporation ('BBC'), Independent Television Publications Ltd. ('ITP') and Radio Telefis Eireann ('RTE'), of copyrights in TV listings to an Irish company called Magill, which wanted to publish a composite TV guide, including the schedules of these three companies, which otherwise could only be obtained by buying three different TV guides.

The ECJ confirmed the CFI, which after finding that the refusal in question restricted competition at a level more than required in order to perform ''the essential function'' of the IPR , upheld the Commission decision ending up with compulsory licensing.

Following its judgment in Volvo, the ECJ stated that existence of an IPR is ‘‘a matter for national rules’’ until ‘‘Community standardization or harmonization of laws’’ is achieved. It also indicated that it is only under ‘‘exceptional circumstances’’ that a duty to license arises. In order to find out whether refusal to license the exclusive rights in TV listings is an abuse of dominance, the Court invoked the four-prong exceptional circumstances test introduced by the Commission and interpreted by the CFI.

As regards the first condition of indispensability, the ECJ, while acknowledging that ‘‘not all IPRs confer dominance’’, stated that in the case at hand the broadcasters have a de facto monopoly over television programme listings and since they are the ‘‘only sources of basic information on programme scheduling’’, the only way to offer a comprehensive ‘‘weekly television guide’’ is to obtain licenses from all three enterprises.

Secondly, the ECJ found the refusal to be abusive under Article 82(b) on the basis that it prevented the ‘‘appearance of a new product’’ (comprehensive weekly TV guide) for which there was a ‘‘potential consumer demand’’ and which was not offered by the right holders. In essence, this is an indirect way of weighing the consumer interests against the interests of the right holders. As noted by Monti, if there is an unsatisfied need on the part of the consumers, then with the offer of a new product on the market they will be better off. It is important to note that by the introduction of this condition, which was not seen previously, the standard for imposing compulsory licensing was set at a higher level and the first step towards special treatment to IP cases was taken.

Thirdly, the ECJ examined whether the refusal could objectively be justified. It found no reason with regard to ‘‘TV broadcasting’’ and ‘‘publishing TV magazine’’ that could legalize the refusal. Beyond that, it did not elaborate on what amounts to an objective justification. Nonetheless, it seems clear that the ownership of an IPR does not itself constitute a sufficient basis for justifying the refusal. This attitude of the Court can, arguably, be regarded as a precaution not to make a direct balancing of the interests of consumers and the right owners.

Regarding the last condition, the court referred to *Commercial Solvents* and held that the TV companies excluded all competition ‘‘in the secondary market of TV guides’’ by preventing third parties from competing in this market so as to reserve the weekly TV guide market, to themselves. At this point, one must note that *Commercial Solvents* can be distinguished from *Magill* on three important bases. First, in the former the refused asset is a tangible property whereas in the latter it is an intangible property. Second, the former concerns the termination of supply, which aims at excluding competitors of the dominant firm, whereas the latter deals with a ‘‘first time’’ refusal which is designed to prevent the new entrances into the relevant market. Third, the former aimed at protecting a particular undertaking, which is associated with the economic freedom model, whereas the latter put the stress on the protection of competition as a whole. As noted by Korah, from a competition policy viewpoint, this signals a move from economic freedom model to ‘‘consumer welfare’’ approach.

After its assessment of each prong of the ‘exceptional circumstances’ test, the Court decided that the CFI was justified in reaching the conclusion that refusal in question was a violation of Article 82 EC and in awarding compulsory licensing. In the overall, the ECJ judgment in Magill can be seen as a big step towards outlining the boundaries of the EFD for IP cases based on its identification of certain conditions for granting compulsory licensing. Nevertheless, the uncertainties inherent in the judgment should not be overstated. In particular, the Court seems to be influenced by the questionable scope of protection granted to the information in giving its decision. This raises the question as to how it can make a judgment, even implicitly, on the existence of the IPR, although it is not eligible to do. Secondly, it is unclear whether altering the existing products is sufficient to satisfy the new product test or the product needs to be ‘‘new and different in kind’’. Another question is whether the exceptional circumstances should be interpreted as cumulative or alternative, and thus whether the new product criterion is necessary or sufficient basis for considering the refusal as abusive. One might argue that by using the conjunction ‘‘and’’ the ECJ favoured a cumulative reading of the exceptional conditions.

The clarification of these ambiguities arises as a duty for subsequent cases if the task is to achieve the proper balance between IP and competition law. The first step towards clarification is taken by labeling *Magill* as an exceptional case bearing special features and one that should be evaluated on its own facts. The further steps are taken, not in an evolutionary method but in a ‘one step ahead, one step back’ manner.

3

Case Law After *Magill*

Tierce Ladbroke is the first case dealt with, in the post-*Magill* jurisprudence on refusal to license. This case concerns the refusal of French horse racing societies and Pari Mutuel Urbain Français, to grant a bookmaker called Ladbroke a license to rebroadcast the French horse races in Belgium. Thereupon, Ladbroke applied to the Commission, and alleged, by relying on the EFD and the ECJ judgment in *Magill*, that the refusal conduct was an abuse of dominance. The Commission rejected the application and in the appeal of the case, the CFI approved the Commission decision. Initially, the Court distinguished *Magill* from *Ladbroke* on the basis that in the former, the refusal prevented the appellant from entering into the market whereas in the latter the defendants did not even operate in Belgium horse racing market where Ladbroke had a dominant position. Therefore, the refusal could not restrict competition in that market.

It then clarified that even if relevant French companies were active in Belgium betting market, this was not a determinant factor alone and restricted the finding of an abuse in two ways: First, it subjected the indispensability condition to the absence of ‘‘an actual or potential substitute’’ and stated that even if broadcasting horse races on TV is a ‘‘suitable’’ service, it is not ‘‘in itself indispensable’’ to operating in the horse betting market. Second, it elucidated that the refusal must prevent the emergence of a product for which there is a ‘‘specific, constant and regular potential’’ consumer demand.

Contrary to these ‘steps ahead’, the CFI adopted an alternative reading of the exceptional circumstances by joining the conditions together using the conjunction ‘‘or’’. Therefore, the prevention of the introduction of a new product , even if the indispensability factor is not met, would be sufficient for a finding of abuse under Article 82 or vice versa. Seen in the bigger picture, the CFI judgment in *Ladbroke* is fortuitous for IP owners; at least to the extent that it shows that the doctrine cannot be applied without limits.

The CFI followed the same approach in the case of ***European Night Services*** in which it deals with the question of whether the Commission was right in concluding that there was a violation of Article 81. Relying on its reasoning in *Ladbroke*, the CFI annulled the decision based on the lack of sufficient and correct analysis of restriction on competition. It further held that a facility can only be regarded as ‘‘necessary or essential’’ where it is ‘‘not interchangeable’’ and where there exists ‘‘no viable alternatives'' of the essential facility. Hence, the CFI seems to caution the Commission to refrain from resilient attitudes in applying the EFD to IP cases.

Another important case defending a cautious application of the doctrine in IP cases is ***Bronner*** . The case, even if it does not involve IPRs, is of significant importance since it is based on the early refusal to license cases and it is cited in subsequent cases of *IMS* and *Microsoft*. Moreover, it is regarded as confirming the assimilation of the doctrine in the EC context. *Bronner* concerns the refusal by Mediaprint (a dominant undertaking in the daily newspapers market in Australia) to supply the home-delivery system, which was not offered by any other undertaking in Australia publishing sector, to Oscar Bronner, which operates in the same market. Thereupon, Oscar Bronner requested the Austrian national court, to give an order mandating Mediaprint to supply the system in question ''against payment of reasonable remuneration''. Subsequently, the Austrian Court referred the case to the ECJ for a preliminary ruling on whether Mediaprint's refusal constitutes an abuse under Article 82.

The ECJ developed a ''tripartite'' test by collating the conditions laid out in *Magill* and *Ladbroke* with an implicit intent to draw a distinction between tangible and intangible property cases.

Regarding the first condition, the Court stated that the refusal must be ''likely to eliminate all competition in the daily newspaper market on the part of the person requesting the service''. Thus, it inserted an element of possibility into the test by using the term of 'likelihood', which was not seen in *Magill*. Furthermore, unlike *in Magill*, refusal in *Bronner* did not exclude the claimant out of the market. Moreover, the Court neither followed Advocate General (hereinafter 'AG') *Jacobs* nor the ECJ judgment in *Magill*, and returned from consumer welfare back to the old approach of economic freedom, by focusing on the impacts of refusal ''on the part of the person requesting the service''. Finally, the Court distinguished *Commercial Solvents* and *Telemarketing* from *Bronner* due to the fact that in the latter the existence of alternatives prevents competition in the downstream market from being completely removed. This attitude makes it difficult to draw certain lines between the conditions of indispensability and elimination of competition, which were originally designed as separate with each other.

Secondly, the Court required the refusal to be ''incapable of being objectively justified''. However, it did not provide clear specifications as to the coverage of this condition. Nonetheless, there are, at least, two methods of interpretation: First, an assessment can be made solely from the part of the right holder; or secondly, following the opinion of AG *Jacobs*, the negative and positive impacts of refusal on competition in the secondary market can be balanced with each other.

Regarding the third condition of indispensability, the ECJ, in accordance with AG *Jacobs*, adopted a strict interpretation and stated that the service can only be regarded as ''indispensable in itself'' in the absence of the ''actual or potential substitutes'' . The Court went on to say that there were other daily newspaper distribution means such as selling at small shops and kiosks or delivering through postal service even if they were ''less advantageous'' because of late delivery. Furthermore, it found no ''technical, legal or even economic obstacles'' which would make it ''impossible, or even unreasonably difficult'' for any daily newspaper publisher to develop a substitute system. It then elucidated that economic infeasibility based on a low level of circulation is not sufficient to conclude that development of substitutes is not a ''realistic'' way to follow, unless it derives from the impossibility to create a substitute ''with a circulation comparable to that'' achieved by using the essential facility. In the light of these conditions, Korah argues that if a case like *Commercial Solvents*, where the alleged essential facility has alternatives, were to arise today, it would be decided differently.

It can be realized that in *Bronner*, the ECJ did not examine the new product requirement. However, this omission does not seem problematic when it is taken into account that the Court has drawn an implicit line between IP and non-IP cases by stating that refusal to license cases can only be assessed by reference to *Magill* principles. This means that *Bronner* will be applied to tangible property cases whereas the cases involving IPRs will be decided under *Magill*.

Finally, the use of the conjunctions ''not only…but also'' suggests that the ECJ, unlike the CFI in *Ladbroke*, has favoured a cumulative reading of the exceptional conditions.

Overall, the ECJ, in *Bronner*, has refined certain conditions in the earlier case law, which lacked sufficient clarity. Elaboration on the indispensability and considering the conditions as cumulative are positive steps towards achieving certainty in this particular context. Nonetheless, a series of issues has remained unclear. First, there is an inconsistency on whether economic freedom or consumer welfare approach should be adopted. As regards the elimination of competition, the ECJ adopts a stance akin to the economic freedom approach, whereas in relation to the indispensability condition it makes an assessment considering ''any potential competitor''. Second, the question of how a refusal can objectively be justified is passed over in silence. Third, it is difficult to understand why the indispensability and elimination of competition conditions are so much linked with each other.

4 The recent Cases of Refusal to License

4.4.1 *IMS*

More recently, the EC competition authorities have questioned the refusal of a facility, which is considered to be a de-facto industry standard in the ***IMS*** case. Particularly, IMS (a worldwide leader in provision of pharmaceutical information) gathered ‘‘data on regional sales of pharmaceutical products in Germany’’ and developed a format called ‘‘1860 brick structure’’ for presentation on German market. As a result of the collaboration of the pharmaceutical industry during its creation, the structure had become a de-facto industry standard, which had been ‘‘open’’ to all competitors in the market. However, afterwards IMS prevented National Data Corporation (‘NDC’) and AzyX from using the structure over which it claimed exclusive rights, based on the order it obtained from the German Court. Thereupon, NDC had lodged a complaint to the Commission alleging that the IMS’ refusal was a violation of Article 82.

4.4.1.1 The Commission Decision in *IMS*

The Commission, in order to find the applicable test, first, referred to the ‘exceptional circumstances’ test in *Magill*, and then looked at *Ladbroke* in which the new product condition was omitted. Finally, it turned to *Bronner, which* it saw as confirming this omission. Following, it stated that the case, even if involved an IPR, would be examined under the tripartite test of *Bronner*.

In the light of the Bronner conditions, first it assessed the indispensability of the brick structure to operating in the market for data services of German sales. It stated that ‘‘without the contributions of the pharmaceutical concerns’’, it would have been difficult, if not possible, to create such a brick structure. Furthermore, it held that there were significant economic, legal and technical constraints to the possibility for the pharmaceutical companies to ‘‘switch to using another brick system’’; such as the unacceptably high level ‘‘costs of modifying internal applications’’; the competitive disadvantages of a possible modification; the inability to provide data older than that was provided by the new structure; the technical restraint by the ‘‘administrative boundaries’’(since the structure was postcode-based); the possible constraints by the German data protection law on the newly devised structure and the legal uncertainty as to protection granted to IMS' brick structure. Following these examinations, it concluded that the indispensability condition was satisfied.

Secondly, it dealt with the issue of objective justification in a fairly short section (between paras. 167-174). It first reiterated the *Volvo* principle that there is no general obligation to license for the right owners. Then it cited the cases of *Magill* and *Bronner* and stated that a refusal can be abusive under Article 82, where it is ''incapable of being objectively justified''. On the facts of the case, it concluded that IMS did not have any objective grounds to justify its refusal.

Finally, the Commission considered the issue of elimination of competition. Based primarily on the fact that the brick structure was a de facto industry standard , it held that IMS' refusal to grant a license to the 'only' competitors present in the market, was ''likely to eliminate all competition in the relevant market''.

The Commission, after establishing that the *Bronner* test was satisfied, concluded that IMS has ''prima facie'' abused its dominant position and gave an order obliging IMS to grant all competitors ''currently present'' in the downstream market access to the brick structure. It also suggested the appointment of an ''independent expert'' to adjudge in case of failure by parties to reach an agreement.

The above made analysis shows that the Commission has taken 'four-steps back' in the road to sustaining the proper balance between competition and IP law. First, the market in which the competition is likely to be eliminated is not specified. . Second, the omission of the new product requirement implies that the Commission does not acknowledge the *Bronner* distinction of refusals of tangible property and refusals to license. As rightly noted by Derclaye, the result would have been different if the new product requirement was considered since IMS refusal did not preclude ''the appearance of a new product''. Thirdly, the Commission has interpreted the exceptional conditions as alternative by saying that the refusal can violate Article 82, even where only the ''new product'' condition is satisfied. This apparent misapplication of the *Magill* test constitutes the primary reason for why the President of the CFI suspended the decision. Particularly, he has drawn attention to the importance of a cumulative reading of the *Magill* conditions for the sake of the future refusal to deal cases. Following this order, the President of the ECJ refused the appeal of IMS to the CFI.

It should be noted that the Commission withdrew its decision, upon the order of the German court allowing ‘‘the use of equivalent brick structure’’. However, a second stage in *IMS* case has begun with the reference by German Court to the ECJ for a preliminary ruling on the interpretation of abuse of dominance in respect of the copyright infringement action.

4.4.1.2 The ECJ Judgment in *IMS*

The ECJ has taken the opposite position with the Commission by prescribing a four-part test, which appears to be the re-statement of *Magill* and hence to be the acknowledgement of the *Bronner* distinction. This is also in line with the view of AG *Tizziano* suggesting a strict reading of the exceptional circumstances in IP cases by requiring ‘‘something more’’ to be satisfied.

The Court assessed the first condition of indispensability in the same manner as it did in its judgment in *Bronner* (paras. 43-44). Transposing the legal standards for indispensability in *Bronner* to the facts of the *IMS* case, it found that the high-level of contributions of the pharmaceutical companies ‘‘created a dependency’’ on the brick structure . Moreover, the costs to be incurred had a deterrent effect on those who whished to create an alternative structure. Based on these observations, the Court concluded that the indispensability criterion was satisfied.

Regarding the new product requirement, the ECJ, following the opinion of AG *Tizzano*, clarified that the new product concept does not cover duplication or ‘‘me-too’’ products and this condition can only be satisfied where the party seeking access has the ‘intent’ to bring the market new products for which there is a ‘‘potential consumer demand’’ and which is not offered by the right owner. It should be noted that the Court by limiting the existing products to those offered by the right owner diverges from the AG *Tizzano*’s opinion suggesting that all products existing in the market should be considered. In this context, Kanter argues that the Court identified the new product test based on its ‘‘subjective meaning’’, because of its unreadiness to extend the EFD to ‘‘pure horizontal relationships’’.

Again in line with the view of AG *Tizzano*, the Court required that the interests in IPRs be weighed against the interest in ‘‘protection of free competition’’ which can only prevail where the refusal precludes ‘‘the development of the secondary market’’ to the harm of consumers.

Finally, the Court held that the application of the new product test is a matter for national courts. As shown by Killick, the national court should consider that the new product requirement is not fulfilled on the basis that both IMS and NDC offer the ‘‘same underlying service’’ even if they may differ in terms of ‘‘quality or nature’’.

In sum, the Court, unlike the Commission, gives special importance to the new product condition and goes a step further than *Magill* by clarifying, if not entirely, its meaning.

As to the objective justification condition, the Court gave no guidance further than requiring justification to be demonstrated ‘‘by objective considerations’’ and left the examination of the condition to the national court. Ridyard criticizes this criteria on the basis that it cannot be linked with any economic value, in respect of the IPRs which can be exploited without ‘‘any constraint on its capacity’’.

Regarding the last condition, the ECJ indicated that the refusal eliminated ‘‘all competition on secondary market’’ . Therefore, the Court did not invoke the concept of ‘likelihood’ in defining the relevant legal standard for elimination of competition and it limited itself to considering the ‘‘immediate’’ impacts of the refusal on the secondary market. Furthermore, it has adopted the consumer welfare approach, by focusing on the protection of competition.

The Court also considered the issue of identification of a distinct upstream market and in accordance with the view of AG *Tizzano,* it stated that the ‘‘potential or even hypothetical identification’’ of an upstream market is sufficient to demonstrate its distinctiveness. It also added that the upstream market can be distinguishable where there are **‘‘**two different stages of production’’, which are interdependent. In terms of the facts of the case, the Court only emphasized the importance of considering the indispensability of the brick structure to carry on business in market for data on ‘‘German regional sales’’ of pharmaceuticals, yet it left its examination to the national court.

A last point to note is that the Court has interpreted the above-mentioned conditions in a cumulative fashion. However, it has complicated to grasp whether the listed conditions are numerus clausus by regarding the presence of all three conditions as sufficient, rather than necessary. As argued by Ritter and Anderman, the fact that the ECJ in *IMS* has inserted the sufficiency criteria after examining *Volvo* and *Magill* suggests that it is the result of an intentional choice. If this argument holds true, then it would undoubtedly be impossible to predict the fate of the future IP cases. At this point, it is crucial to identify the issues that remained unresolved.

First, as observed by Byrne, it is unclear how much difference is necessary to distinguish the non-duplication new product from that offered by the right owner. Moreover, the term 'intent' to generate new products, makes the picture even more blur in that there is no indication as to how this can be demonstrated or whether intent would in itself be sufficient to justify the existence of the new product.

Second, it seems irrelevant to consider whether the right owner operates in the downstream market, since the determinative test for a distinct upstream market is based on the existence of indispensability.

Third, it is not entirely clear what constitutes a secondary market. As noted by Killick, the separate secondary market condition would be devoid of value if it can be identified easily based on its potential or hypothetical existence. Furthermore, Geradin considers that such an approach will result in a reduction in right owner's incentives to innovate .

Fourth, even if the Court has acknowledged the *Bronner* distinction between IP and non-IP cases, it has failed to make a differentiation between different types of IPRs. Fifth, as in *Magill*, the ECJ, in giving its judgment in *IMS*, seems to make an implicit consideration that the brick structure which can be established without creative effort, is not worth of being protected by IP law. Hence, it turns the doctrine of existence/exercise of the IPR into an abstract theory. In this regard, Forrester makes a prediction that if the issue had arisen in relation to pharmaceutical products or software programmes that require high investments, the case would have been decided differently. This raises an important question as to how the exceptional circumstances test will be applied in dealing with the technology-based problems of the new economy.

4.4.2 *Microsoft*

The most recent refusal to license case of ***Microsoft*** comes from the era of high technologies and questions the essentiality of ''interoperability information''.

In essence, the *Microsoft* case is the recent application of an earlier case called *IBM* where the issue of interoperability has been addressed for the first time. The case basically concerns the IBM's discriminatory treatment between its downstream subsidiaries and the other downstream competitors in the supply of interface information. *IBM* is relevant in the assessment of *Microsoft* case in two respects: First, in *IBM* the main danger that the Commission wished to attract attention was the anti-competitive behaviors of companies in case computer programs have become a *de facto* standard in the market as is the case in *Microsoft*. Second, it is referred to by Microsoft in order to illustrate an example of ''careful and balanced judgment with regard to disclosure obligations''.

Fourteen years after the *IBM* case, in 1998 the Commission has been visited by the Sun Microsystems alleging that Microsoft abused its dominant position in the Client PC operating system ('PCOS') market by ceasing to supply necessary ''interoperability information'' to its competitors present in the work group server operating system market ('WGOS') .

Initially, the Commission, quoting from *Magill* (paras. 49-50) reiterated that refusal to license cannot ''in itself constitute'' a violation of Article 82, in the absence of the ''exceptional circumstances''. Interestingly, however, the Commission did not abide by any of the tests established in the earlier cases, in order to examine the existence of the exceptional circumstances and stated that it would make an examination ''in the entirety of the circumstances''. Nonetheless, the *Magill* conditions can be seen as scattered in different parts of the decision.

The Commission assessed the first condition of indispensability in the light the ECJ judgment in *Bronner*. Therefore, it has questioned whether there are any ''actual or potential substitutes'' to the contested facility. However, the way it has followed to find the answer is slightly different from that in Bronner. Indeed, in *Bronner* (paras. 43-47), which is in line with *Ladbroke* (para. 132) and confirmed in *IMS* (para. 28), the existence of substitutes ''even if they are less disadvantageous'' is sufficient to satisfy the indispensability condition unless there are significant ''technical, legal or economic'' constraints on the downstream competitors to create an alternative. However, when the *Microsoft* case is analyzed, the Commission has acknowledged the existence of some level of interoperability between PCOS and WGOS but found it to be insufficient to amount to an alternative.

The above made observations expose that the test for indispensability in *Microsoft* is set at such a level that it is impossible to disprove without demonstrating a fairly high level of interoperability. This can be seen as the first blow to the high-tech industries.

Regarding the second condition, the Commission, after citing the ECJ judgments in *Magill*, *Telemarketing* and *Commercial Solvents*, required the refusal to ''risk'' eliminating competition and stated that it would analyze the condition with the focus being on the importance of interoperability in order to compete in the downstream market and the market power of Microsoft on the upstream market. In essence, it based primarily on the leveraging theory and questioned whether Microsoft had used its power in the PCOS market in order to ‘‘strengthen its position in the WGOS market’’. As rightly argued by First, the application of the leveraging theory, based on simple demonstrations is alarming for the future IP cases.

The Commission then clarified that it is concerned not with whether the refusal has an actual or immediate impact on the competition in secondary market or whether any level of interoperability is ‘‘impossible to be achieved’’, but rather with ‘‘competitors viably staying in the market’’. Accordingly, it found that the downstream competitors have suffered a ‘‘strong competitive disadvantage’’ as a result of Microsoft’s refusal. At this point, one might argue that the Commission, by not limiting its examination to the actual changes on the downstream competition, aimed to intimidate Microsoft to be careful about its future conducts. Yet this does not disguise the fact that the *Microsoft* standard for ‘elimination of competition’ is looser than the ‘likelihood’ standard set in *Magill* and confirmed in *IMS* as well as than those established in *Commercial Solvents* and *Telemarketing* cases in which as clarified by the court in *Bronner*, the refusal is ‘likely to eliminate all competition’. Nevertheless, one might argue that it is more akin to the one in *Commercial Solvents* than in *Telemarketing* since in both cases the existence of alternatives precludes a finding of complete removal of competition in the relevant market. Another point to note is that based on its concern with the exclusion of the existing competitors rather than the prevention of new entrants, the Commission has put the concept of new product in question.

The Commission, in order to justify the way it assessed the elimination of competition, relied on the network effects produced by the Microsoft’s products, which it considered as blocking access to the market. In particular, it has detected three network effects. First, consumers have a strong incentive to continue to use Microsoft products in order for their computers to work well with more computers. Second, designing an alternative PCOS is ‘‘extremely difficult, time-consuming, risky and expensive’’ in that consumer would not choose a product of which the applications are not widely used by other people . Third, switching to a new system will be expensive to consumers for whom the need to learn how to use it or to pay for the new equipments will arise. This superficial instead of a detailed economic analysis implies that the

Commission chooses the shortest way to reach the conclusion that the refusal in question risked elimination of competition in the relevant market.

As to the third condition of objective justification, the Commission first recalled that the exclusivity granted by the IPR cannot be considered as a ‘‘self-evident’’ basis for objective justification. Moreover, it acknowledged that the IPRs are bestowed as ‘‘rewards for creative effort’’. At first sight, this seems to be no more than confirming the early cases, but there are at least two differences to be noted. The first one is pointed out by Korah: he argues that alongside with the ‘exceptional circumstances’ criterion, it has invoked the concept ‘‘the function of the right’’ which had previously been seen in the CFI Judgment in *Magill* (para. 73). Secondly, it has mentioned the IP law’s ‘‘moral rights’’ aspect which is more prevalent in civilian than in common law jurisdictions.

The Commission, then, identified a balancing test for the assessment of objective justification, but after three attempts: First, it weighed Microsoft’s ‘‘incentives to innovate’’ against ‘‘the exceptional circumstances’’. Then interestingly it changed track and decided to balance the former against what it described as ‘‘general public good’’, which is measured by the impacts on innovation and the interests of consumers. Thereby, unlike the earlier cases of *Magill* and *IMS*, in which it had settled for the indirect balancing effect of the new product requirement, in *Microsoft*, it directly balanced the advantages and disadvantages of refusal for consumers. The final version of the test was set forth as the possible ‘‘negative impact’’ on Microsoft’s innovation incentives of granting access to the indispensable facility against ‘‘the positive impact on the level of innovation in industry as a whole’’.

Beyond doubt, the rationale underlying the Commission’s ruling is that more consumer welfare can be achieved if more competitors exist in the market. Accordingly, if Microsoft, does not disclose necessary interface information, it will not be possible for other competitors to operate in the market, which in turn, leads to ‘‘a stifling in innovation’’ on the basis that the ‘‘consumers choices’’ will be limited to the innovations offered by Microsoft**.** From this stance, it is in line with *Magill* and *IMS* in which the consumer welfare approach was adopted. Nonetheless, it made a crucial mistake by not considering that the design of the new technologies requires high level-investments and in the case at hand, Microsoft was the only source of investment, unlike IMS, which created the pharmaceutical data in collaboration with the other pharmaceutical companies. Furthermore, it disregarded the fact that, in technology markets, the companies offer new products, which will replace the existing ones and which will dominate the market until a new generation is introduced. Hence, the market players compete ‘‘for the market’’, rather than competing ‘‘in the market’’. Moreover, the market conditions do not bear a static character.

The aforementioned disparities of the information technology (‘IT’) markets necessitate a more careful analysis before applying the EFD to the cases arising out of technological wars. In *Microsoft*, the Commission, let alone establishing satisfactory principles for the objective justification condition, has introduced a balancing test, which guarantees a conclusion against Microsoft.

In essence, this is a warning note stating that ‘broad claims’ of right owner can be curtailed by invoking competition law. Moreover, due to its ‘open-ended’ nature, and unforeseeable implications, it has thrown the third heavy blow to the IP holders in new technologies.

Finally, the Commission dealt with the new product condition within a fairly short section (between paras. 693-701). In its assessment, it focused its attention on the impacts of refusal on ‘‘technical development to the prejudice of consumers’’. This implies that the prevailing view is that ‘the consumer is king’ and the new product condition is only a means to serve the interests of consumers. Besides, it stated that Microsoft’s refusal to disclose interface information has the effect of limiting the emergence of possible future innovations and asserts its concern that in the ‘longer’ run there will be no ‘‘new products other than’’ that offered by Microsoft if a remedy is imposed to prevent this. In this respect, there are three points to be noted:

The first one is that the standard set by the Commission in *Microsoft* is clearly looser as well as more uncertain than that is established in *Magill* (refined in *IMS*) on following bases: First, the software product that is prevented from emerging is the same as is offered by Microsoft. Secondly, in *Microsoft,* there is no actual demand on the part of the consumers and possibly, for this reason, the Commission has focused on the ‘unrealized’ future products, which can be anything technological. Furthermore, the Commission, by focusing on development of new products, rather than the emergence of them, suggests that even where the newcomers offer the existing products with a few alterations, the test would be satisfied. Moreover, the market in which the new product will be offered is not specified. In the end, there is a new threshold for the new product requirement, which is set nearly at ground level and thereby, which leaves no room for IP owners to legally enjoy their rights.

The final question would be whether the Commission applied the exceptional circumstances in a cumulative or alternative manner and whether the listed conditions were considered as numerus clausus or non-exhaustive.

Regarding the latter, it declared that the examination must be a ‘‘comprehensive’’ one which entails a consideration in the ‘‘entirety of the circumstances’’ of the case . In order to support this view, it cited first *Commercial Solvents* and *Telemarketing* and then *Magill* to indicate that the presence of existing or new customers even if a non-essential condition ‘‘for finding of an abuse’’, is considered in examining the ‘‘instances of refusal to supply’’. Furthermore, it referred to *Volvo*, which embraces an unrestricted approach to the exceptional circumstances.

In respect to the non-exhaustive character of the listed conditions, it demonstrates a certain level of consistency with *IMS*. Yet, one might question whether it has broadened the standards too much by defining the boundaries of its investigation as the ‘‘entirety of the circumstances’’. This perspective of the Commission is interpreted by Ridyard as representing a move towards a new doctrine of ‘‘convenient facilities’’ in which compulsory licensing is seen not as a ‘‘last’’ resort but rather a ‘‘convenient’’ one to be invoked.

Regarding the former question, the Commission has remained silent. Nonetheless, in light of the rest of the decision, there is nothing to justify an outcome in favour of a cumulative consideration.

On March 2004, only one month before the ECJ judgment in *IMS,* the Commission has delivered its decision. It held that Microsoft’s refusal constitutes an abuse of dominant position and ordered Microsoft ‘‘to disclose complete and accurate’’ interface ‘‘specifications’’, except the source code, to all competitors in the WGOS market, and to update it with each new version of the relevant products it brings to the market. Moreover, it proposed the appointment of a ‘‘monitoring trustee’’ to oversee Microsoft to ensure its fulfillment of its obligations satisfactorily .Two years after its decision, the Commission imposed a penalty of 497 million euros on Microsoft because of its failure to carry out its obligations.

On September 2007, Microsoft appealed the Commission decision to the CFI. The Court, in its judgment was concerned with whether the *IMS* test was satisfied by the Commission, with the focus on the new product requirement. Similar to the Commission, the CFI examined the new product condition in terms of constraints on ‘‘technical development to the prejudice of consumers'', pursuant Article 82(b) which considers prejudice to be both direct and indirect. The Court, then, made the most perplexing statement, mainly that Microsoft had impeded ''effective competition on the WGOS market by acquiring a significant market share on that market''. As observed by Clarke and Morgan, there is no reference to any kind of test, by which the impacts of the refusal on ''effective competition'' can be assessed. This implies that the CFI depended on the Commission so much that it did not even feel a need to invoke some kind of legal or economic analysis while reviewing its decision. The only point that the CFI disagreed with the Commission was the appointment of monitoring trustee, which it found to have ''no legal basis'' in Community law and decided that this part of the decision must be annulled.

On the whole, the CFI develops a method by which the earlier case law can be applied without any need for discussion on justification.

At a moment when all eyes were directed towards a possible ECJ judgment, Microsoft announced that it would not continue the proceedings, possibly by fear of getting a more rigorous judgment than that of the CFI. Therefore, what remained is a bunch of uncertainties regarding how the EFD should be applied in technology cases.

5 The Remaining Uncertainties, A General Review of the Existing Case Law on Refusal to License

The identification of the unresolved problems is the first step in outlining the boundaries of the EFD, in respect of IP cases, particularly those related to the technological era, which is in a constant change. These uncertainties can be laid down as follows:

First, the Commission's insufficient examination of the new product test, in both *IMS* and than in *Microsoft* suggesting that, it did not find it necessary to draw a difference between intangible and tangible property rights.

Second, the level of exclusivity, and thus the impact of the refusal on the market depends on the type of IPR in question. In *Magill*, *IMS* and finally *Microsoft*, the facility with which the access is mandated is protected by copyright. This implies that the competition authorities do not feel hindered in intervening in the realm of copyright law. However, it is uncertain whether it will react in the same way where the essential facility is protected by an IP other than copyright.

Third, the Commission *in Microsoft* makes no difference between the IPRs in interface information and those in factual datas (TV listing information in *Magill* or pharmaceutical data in *IMS*). The absence of such a distinction is problematic since it disregards that the former requires high amounts of investment and a considerable ''intellectual effort'' for its creation.

Fourth, there is no explicit indication as to the level of competition that should be eliminated. One might also question whether it attempts to invoke traditional refusal to supply principles under the EFD concept, by focusing on the exclusion of existing competitors. This is seriously problematic since in the former; the aim is to prevent the undertaking from distorting the competitive structure of the market whereas in the latter the aim is to create a more competitive market. Besides, it is questionable how the Commission found that Microsoft with a market share of 55% risked eliminating competition in the WGOS market of which the competitors constituted a substantial part.

Fifth, the question of how a sufficient legal and economic analysis can be made in dealing with complex technology cases has been passed over in silence. Additionally, the features required for a substitute to be considered as 'real' had not been identified and this makes it impossible for technology owners to make future plannings.

Sixth, the final version of the balancing test equates the private interests of Microsoft with the public interests of the industry as a whole. It may not seem so problematic when considered in the light of the market share of Microsoft in the PCOS market. Nevertheless, the question should be whether it is accurate both legally and economically to apply the same test in assessing the refusal by any other dominant firm. If so, then it would be almost impossible to objectively justify the refusal.

Seventh, from a competition policy perspective, the adoption of a consumer welfare rather than an economic freedom approach is the right instinct, but what is wrong is that the consumers are ascended by the commission from being the 'king' to being the God. The question is whether all roads have to lead to consumers. If the answer is yes, then there is no escape for the EC competition authorities from being described as the ''consumer welfare watchdogs''.

Eighth, the Commission's failure to specify the new product market raises the question as to whether it is possible to satisfy this condition when the market for the new product and the market in which the competition is eliminated by refusal are different. Moreover, if the unrealized future products suffice to satisfy the new product condition, then how would it be possible to disprove it?

Ninth, it is impossible to grasp how the dominant enterprises can make any self-judgment as regards their conducts with other market players where the Commission has defined its investigation arena as the 'entirety of circumstances'. Furthermore, when this is coupled with an alternative reading of the exceptional circumstances, then will it be possible for any dominant enterprise to escape from the 'scourge' of the EC officials?

Last one is the fate of IP holders in technology markets if the Commission's interpretation of the existing standards is followed in future refusal to license cases. Is there an implicit attempt to create a process by which right holders will have to get permission from the EC competition authorities to exercise their rights? If this should not be the case, then what is the alternative?

4 SUGGESTING OF SOLUTIONS

The application of EFD to IP cases, particularly after the Commission decision (as confirmed by the CFI) in *Microsoft* has been put under spotlight by many commentators to find out how the above-mentioned problems can be best offset.

As an initial note, the identification of the proper extent of intervention by competition law in the era of IP law should be the main goal to be pursued by the EC competition authorities . Hence, a balance needs to be struck between the two regimes. The most efficient way to achieve this end is to avoid ambiguities in legal interpretations of the application principles of the EFD in the IP cases and to keep a close watch on the Commission's review of Article 82 and its possible contribution to this fragile balance.

The first suggestion is related to the doctrine of the existence/exercise of the IPR**.** In *Magill* and *IMS*, the competition authorities, arguably, make implicit assessments, which they not eligible to do, by questioning whether the information is worthy of IP protection. However, if, at least, the sovereignty of Member States over their IP regimes is to be made meaningful, the creativity that an IP work poses should be disregarded in deciding the refusal to license cases. If not, then the competition authorities should alter the distinction theory as 'existence of proper IPRs/exercise of them', at the risk of generating a conflict with the Member States of the EC.

As a second suggestion, the EFD should be applied in IP cases only where new competitors are prevented from entering the market if the aim is to achieve a more competitive market and if the new product test is to be determinative. Surprisingly the Discussion Paper emphasizing the same objective suggests that no distinction should be made between existing and new competitors. Hence, it overlooks the aim pursued when the existing competitors are excluded from the market, which is to preserve the competitive structure of the market against the anticompetitive conducts of the dominant undertakings. Moreover, it disregards the point that refusal to continue to trade can be regarded as a standard abuse of dominance under Article 82.

The third suggestion addresses the need to draw a distinction between tangible and intangible property cases. The question of how this could be achieved can be answered by reference to *Bronner* (paras. 40-41), as clarified by the ECJ in *IMS* (paras. 37-38) that in IP cases, the *Magill* test; in non-IP cases *Bronner* tripartite test should be applied. Likewise, the Discussion Paper places refusal to license IPRs in a separate category than refusal to supply tangible properties and requires more stringent conditions to be satisfied. Such an understanding is crucial to limit the intervention by the competition authorities in the exercise of IPRs.

Fourth, the Discussion Paper draws attention to the high-level intrusion, as shown towards copyrighted facilities and argues that it may not be appropriate if the facility is protected by trade secrecy. Accordingly, in future cases, the competition authorities must bear in mind that different IPRs confer different level of market exclusivity, and therefore have different levels of impact on the market and they must define the boundaries of each IPR separately.

Even going further, a distinction to be drawn between technological and traditional subject matters within the same type of IPR should be an effective way to avoid disregarding the high-level investments made in the development of technological products.

As regards the each condition of the 'exceptional circumstances' test of *Magill*, the suggested solutions can be summarized as follows:

For the assessment of indispensability criterion, the ECJ judgment in *IMS* should be followed with a few additions. First, alongside the ''unmet consumer demand'' condition, the market power of the dominant undertaking in the downstream market should be considered. Indeed, if this approach had been followed in Microsoft, 55% market share of Microsoft in the WGOS market would have disproved the indispensability criterion. Such an approach also prevents the 'free-riding' possibilities by limiting compulsory licensing to cases where the facility has an extremely essential characteristic.

Secondly, the peculiar features of the technology markets should be considered in order to assess the network effects accurately.

Thirdly, indispensability should be assessed in a way that enables a judgment under the elimination of competition condition, instead of determining its conclusion. Unlike the above made suggestions, the Paper favours a more flexible stance by subjecting it to the impossibility for the competitors to switch to ‘‘alternatives’’.

The suggestion regarding the elimination of competition condition is that ‘all’ competition should be ‘eliminated’ and this should be realized immediately after the refusal conduct. In this respect, the Discussion Paper does not require competition in the downstream market to be distorted completely, especially where the right owner is ‘‘active’’ in the downstream market. While this is not a wrong approach, it is slippery in that its extent is not clearly ascertained. Moreover it looks for a likelihood of ‘‘negative effect on competition’’ which is a looser Standard than elimination of competition. Furthermore, as Hullsuggests the input market and the downstream market in which the competition is eliminated should be defined clearly and actually rather than settling for the ‘potential or even hypothetical’ identification of the market that can be satisfied in almost every case.

Finally, the elimination of competition should not be assessed ‘on the part of individual competitors’ but ‘on the market as a whole’. From a competition policy perspective, this approach favours a consumer welfare model which is espoused in recent case law (*Magill*, *IMS* even in *Microsoft*) as well as in the Discussion Paper. Nonetheless, caution is required not to be a ‘consumer watchdog’, as is the case under *Microsoft*, while implementing the model.

In respect of the objective justification concept, the EC competition authorities have always been reluctant to set the condition on clear grounds. The Discussion Paper offers a highly restrictive approach in order to solve the uncertainty surrounding this condition. Yet, it only identifies two types of objective justifications (‘‘safety or health’’ reasons and ‘‘meeting competition defence’’) to be invoked. Moreover, as indicated by Monti, this condition is designed to be used in two ways, namely ‘‘defence’’ and ‘‘attack’’. Unlike the Paper’s superficial approach, identification of clear boundaries for objective justification needs tactful handling. As noted before, refusal to license reduces competition in the short run but in the long run, it increases the innovation incentives of the dominant enterprises. Importantly, the former requires an ex-post analysis whereas the latter requires an ex-ante analysis, which may not be predictable at first instance.

This arises the need for a balancing test even if some commentators find it to be ''unreliable and unpredictable''.

In accordance with Ritter, the balancing test should consider that when reduction in dynamic efficiency is weighed against the increase in allocative efficiency, the latter prevails. This would then mean that the refusal cannot be justified based on the overriding consumer benefits. A further assessment should be made that the new product requirement, if satisfied strongly, is counted against the existence of objective justification. One must also note that in the face of complex features of the technology markets(i.e. the dynamic character of the technology market or the process of competition as being for the market), the application of this balancing test should be made more carefully. Therefore, from an economic theory perspective, there arises the need to adopt an economic-based approach, which focuses on the effects of the dominant firm's conducts rather than a structuralist theory. This is also the task of the Discussion Paper even though some parts involve involves ''form-based elements''.

As regard the new product requirement, the applicable test should be identified in the light of the ECJ judgment in *IMS*. Therefore, first, there must be ''an unmet consumer demand''. Additionally, in contrast to the commission decision in *Microsoft* which considers unobservable consumer gains as sufficient as well as the Discussion Paper regarding the new product condition as satisfied where the usage of the essential facility constitutes a ''basis for follow-on innovation'' even if it will not end up with ''identifiable new'' products; the demand must be actual and recognizable.

Secondly, the demanded product must not be offered previously. Accordingly, the new product concept does not cover the replication of existing products. Thus, the assessment should be made according to all existing products in the market, not only the products offered by the right owner. As an additional restraint, the product must be ''new in kind''. More importantly, the determinative assessment should be whether the new product constitutes a relevant market, separate from the market in which the right owner's product takes place or at least whether the new product will have a nonpareil characteristic in the market. In this way, the application of the EFD should be limited to vertical relationships. However, neither *IMS* nor the Discussion Paper identifies the market for the new product. Finally, the open-ended term of ''intent'' either should be omitted from the wording of the test or be made clear that the intent is to offer a new product.

The suggestions for each of the four conditions can only have a value if those conditions are interpreted as being cumulative and exhaustive. Regarding the former there is no confusion in the case law, even in *Microsoft*, if not explicitly, the conditions are assessed in a cumulative fashion. Moreover, the Discussion Paper, requires these conditions to be ''all fulfilled''. Nevertheless, the issue of exhaustion has always been passed over in silence. In this respect, the EC competition authorities should show some enthusiasm to adopt a certain and stable stance which favours an exhaustive reading of the exceptional circumstances.

Nonetheless, the issue of exhaustion has always been passed over in silence .The adoption of a exhaustiveness principle will sweep away all legal certainty. Therefore, the conditions other than those identified should only be taken into account if they have a serious impact on the identified ones. In all other cases, the exhaustion principle should be strictly applied.

As a final word, the best way for the EC competition authorities is to develop a comprehensive guideline on what conditions the application of the doctrine in the IP context is desirable, and more importantly how it should be applied in a way to sustain the fragile balance between competition and IP law. This requires a detailed research, which includes the practice approach of the courts and various commentaries, with particular attention on the suggestions put forth.

6 CONCLUSION

The relationship between IP and competition law has never been an easy one but it becomes even more uneasy when the application of the EFD is extended beyond transportation cases to intangible property cases. This is because compulsory licensing, which is imposed as a remedy for abusive refusal to licenses, reduces what IP law is designed to achieve, namely the innovation incentives.

Historically, in the EU practice on refusal to license, the IPRs have shown a special deference. The development of the doctrine of existence/exercise of the IPR, which limits the intervention by the competition policy guardians to anticompetitive exploitation of exclusivity, is the first indicator of that kind of approach. In the cases of *Volvo* and *Renault*, the ECJ clarified that refusal to license does not trigger the application of Article 82 by itself, but it also gives the cue that there might be a possibility that the rules of competition will cause sanctions up to compulsory licensing. The 'exceptional circumstances' under which compulsory licensing is imposed are set forth by the landmark case of *Magill* as a four-part test. By introducing the new product condition, the *Magill* test raises the threshold for abusive refusals. It also takes a positive step by adopting the consumer welfare, rather the economic freedom model. Beyond that, the uncertainties inherent in the *Magill* judgment of ECJ leaves many questions unanswered. Therefore, subsequent cases are expected to clarify these ambiguities.

In *Ladbroke*, the CFI clarified the indispensability condition but it adopts an alternative reading of the exceptional condition unlike the ECJ judgment in *Bronner*, which favours a cumulative interpretation. The ECJ also elaborates on the indispensability condition and draws an implicit line between IP and non-IP cases. This distinction is then clarified in the *IMS* judgment of the ECJ, which restates the *Magill* conditions and therefore takes an opposite stance with the Commission.

At a time when it was thought that some level of certainty on exceptional conditions was achieved, the *Microsoft* decision of the Commission has demonstrated that the competition authorities can easily intervene with the IP law based on a 'loosening-the-tights' operation. It attempts to bring the classical refusal to supply principles alive under the name of EFD. Moreover, it reveals that the EC competition authorities are ill-prepared to deal with the complexities of high-tech markets.

In the end, what is left in the arena of refusal to license doctrine is a bunch of uncertainties surrounding the application of the doctrine. The suggested way to offset these ambiguities and sustain a proper balance between IP and competition law is to focus on how the judicial interpretation and the application of the existing rules, particularly each condition of the exceptional circumstances test should be implemented. Accordingly, reference can be made to the Discussion Paper where it offers an effective solution and a few alterations in the wording of the exceptional conditions would be useful.

Firstly, the competition authorities must refrain from making judgments that implicitly touches on the existence of the IPR. Secondly, following Anderman and Bergman, the EFD should be invoked in IP cases only where the refusal prevents the new entrance into the market. Thirdly, in accordance with the *Bronner* judgment of the ECJ, in IP cases *Magill*; in non-IP cases, *Bronner* test should be applied. Moreover, different types of IPRs should be distinguished based on the level of exclusivity granted. A further differentiation should be made between different subjects protected under the same IPR in general terms.

Regarding the four-corners of exceptional circumstances test:

First, the assessment of the indispensability condition should take into the market power of the dominant firm in the downstream market, as well as the peculiarities of the technology markets. Furthermore, it should cover the assessment of the refusal's impact on downstream market conditions.

Second, the refusal must 'eliminate all competition' in the downstream market of which the separation with the upstream should be identified in a clear manner. Moreover, the assessment should be based on the competition in the market as a whole. From a competition policy perspective, this corresponds to the adoption of a consumer welfare model, yet caution is required not to exaggerate the interest in protecting consumers.

Thirdly, the objective justification should be assessed based on balancing test under which the condition is satisfied where allocative efficiency gains prevails over the dynamic efficiency losses. The strongly satisfied new product condition should be considered as a basis to demonstrate the absence of objective justification. Furthermore, the sufficient assessment of the complex conditions of the technology markets requires the adoption of an effects-based approach.

The last condition of new product should be met where the demand of consumers is actual and recognizable, where the product is not a duplication of the existing products in the market and where it constitutes a separate market or at least it has a unique place in the present market.

Finally, all these conditions should be interpreted cumulatively as well as exhaustively as long as the serious impacts of other conditions on the existing ones are demonstrated.

It is clearly seen that a perfect application of the doctrine to IP cases is possible, but the success of its application will depend on the interpretation of the existing standards.

If the above made suggestion is to be followed, the first step is to make clear, at the first opportunity, that Microsoft ruling was peculiar to its facts. In the following steps, developing a comprehensive guideline should be helpful in order to be clear about the extent of the intervention by competition in the realm of IP law.

However, if the abovementioned steps are not to be incorporated into the standards for case application, then an alternative option could be the construction of a permission office that each time a right owner wants to exercise his IPR, even legitimately, can go and ask 'dear EC competition authority do you mind if I exercise my intellectual property rights?'

ABBREVIATIONS

AG	Advocate General
Art.	Article
CFI	Court of First Instance
C.L.R	Competition Law Review
C.M.L.R	Common Market Law Reports
C.M.L.Rev.	Common Market Law Review
Colum. J. Eur. L.	Columbia Journal of European Law
Comm.D.	Commission Decision
Cornell J.L. & Pub.Pol'y	Cornell Journal of Law & Public Policy
CUP	Cambridge University Press
DG COMP	Directorate General for Competition
Disc.Paper	Discussion Paper
E.C	European Community
ECJ	European Court of Justice
E.C.L.R	European Competition Law Review
E.C.R	European Court Reports
Edn.	Edition
EEC	European Economic Community
EF	Essential Facilities
EFD	Essential Facilities Doctrine

E.I.P.R	European Intellectual Property Review
E.L.R	European Law Review
EU	European Union
Fordham Int'l L.J.	*Fordham International Law Journal*
Ibid.	Ibidem
i.e.	id est
IP	Intellectual Property
IPR	Intellectual Property Right
J.I.P.L.P.	Journal of Intellectual Property Law & Practice
OCDE/GD	Organisation for Economic Co-operation and Development General Distribution
OECD	Organisation for Economic Co-operation and Development
OJ	Official Journal of the European Communities
OUP	Oxford University Press
p.	page
para.	paragraph
pp.	pages
TEC	Treaty Establishing the European Community
v.	versus
UK	United Kingdom
USA	United States of America
US DOJ	United States of America Department of Justice

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