



Erasmus Law and Economics Review 2, no. 1 (March 2006): 87–98.

Case Commentary

INTELLECTUAL PROPERTY PROTECTION FOR NON-INNOVATIVE MARKETS: THE CASE OF *IMS HEALTH*

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Abstract

This article attempts to answer the question: “When may an undertaking holding a dominant position through intellectual property right protection have abused its position?” My argument is that not all markets involving intellectual property rights are innovative markets. As shown in *IMS Health*,¹ when the product involved is pharmaceutical data, consumer demand for innovation in data format becomes insignificant. It is not that such a demand does not exist, but that consumers could not migrate to a more innovative product because they have spent a large amount of time and money to collect data and store them in the data structure of the old product (the IMS format). This is when the market becomes non-innovative.

Keywords: Intellectual property rights, Competition law, Refusal to license.

JEL classification: K21, O34.

¹ European Commission Decision No. 2001/165/EC, COMP D3/38.044, OJ L 59, 28.02.2002, pp. 18-49.

Introduction

The case of *IMS Health* is an example of how a dominant firm can leverage its market power in one component of a product market to dominate the whole market.² IMS Health (the incumbent) is a pharmaceutical database company. It holds a copyright in a bottleneck element—a specific data format that has since become a standard in the industry.³ Competitors of IMS, namely NDC and AnZyx, asked for a licence for the format but were refused. When they used a slightly modified format, IMS sued for copyright infringement and won the case. Three questions thus emerged: (1) whether it was difficult to invent a data format similar to the format of IMS, (2) why the competitors must gain access to this format, and (3) why they did not develop a new data format and attract new customers

For these questions, the *IMS* decision found that:

(1) It was not difficult to invent a new data format. The IMS format is only a method to allocate pharmaceutical sales data according to the customers' postcodes. However, it was difficult to persuade customers to adopt a rival format, because they have incurred investments by collecting their own data using the IMS format (at para. 74–166).

(2) NDC needed access to IMS's format because the method of formatting data according to the customers' postcodes has become a *de facto* standard of the pharmaceutical industry in Germany, and purely for historical reasons rather than that of efficiency. Customers desire neither innovation nor any change. The problem of innovation was not from the supply side but the demand side.

² European Commission Decision No. 2001/165/EC, COMP D3/38.044, OJ L 59, 28.02.2002, pp. 18-49. The case has been decided by the ECJ on 29 April 2004 (C-418/01, ECR 2004, p. I-5039).

³ I would like to use the term “bottleneck element” instead of “essential facility”, because “essential facility” is a US law doctrine, which has not been officially recognised yet in European Court judgements. In addition, to be qualified as an essential facility, a product needs to meet some standards set forth under *MCI v AT&T* 708 F.2d 1081, at 1132-33: “a monopolist control of an essential facility can extend from one stage of production to another ... The antitrust laws may impose on (this) firm ... the obligation to make the facility available on non-discriminatory terms.” This obligation is established when: (1) the essential facility is controlled by a monopolist; (2) the owner of the facility has unreasonably denied access of the facility to the competitor; (3) a competitor cannot practically or reasonably duplicate the facility; and (4) the grant of access to the facility would be feasible.

(3) NDC and AnZyx could not attract new customers because of their limited number. Only pharmaceutical companies used pharmaceutical data and they were already IMS's customers. In this sector, it was hard to find new customers. Winning over the support of the existing customers is the only way competition takes place in this market.

The Commission has ordered IMS to grant NDC a licence for the standardised data format. This order was later withdrawn⁴ following an ECJ order ruling that there was no urgency in enforcing the Commission's decision.⁵ However, prior to that the Landgericht (District Court) Frankfurt am Main referred to the ECJ three questions regarding the interpretation of Article 82 EC. One question points to the heart of bottleneck exploitation: "Is [the consumers' contribution to the incumbent's standard] relevant to the question of abusive conduct by the [incumbent]?"⁶ The answer by both, Advocate General Tizzano and the ECJ, was a 'yes'.⁷ Without waiting for the answer, the Oberlandesgericht (Appellate Court) Frankfurt am Main then effectively limited the scope of copyright protection for the IMS data format and allowed NDC to use postcodes as components of its data structure.⁸ To avoid confusion between the two cases, C-481/01 and C-418/01, please refer to the timeline in Table 1.

IMS is an example of a market where there is a 'chicken and egg' dilemma: a customer could not buy one product because every other customer has used another product. What is more, customers prefer a popular and standardised product in order to be compatible with the same standard used in other related products.⁹ When all customers demand a bottleneck, the control of the bottleneck is equivalent to the control of customers.¹⁰ Consequently, there is no market opportunity left for other

⁴ Decision 2003/741/EC, OJ L 268, 18.10.2003, pp. 69-72.

⁵ C-481/01 P(R), ECR 2002, p. I-3401.

⁶ C-418/01, opinion of the Advocate General Tizzano dated 2 October 2003, para. 25.

⁷ C-418/01, judgement of 29 April 2004, para. 30.

⁸ Judgement dated 17 September 2002. The Court held that: "the [entrant] could not simply be prohibited from developing freely and independently a [format] that is simply based on [the incumbent's idea] and for that reason comprise more or less the [expression as the incumbent did]." (cited from Decision 2003/741/EC, para. 10).

⁹ *Microsoft v United States* (1999) 165 F.3d 952, *Finding of Facts*: 24.

¹⁰ Whish, R. (2001, 4th ed.) *Competition Law*, 173-74. Butterworths, London.

entrants. Thus the vanishing of investment opportunity will destroy the dynamism of Schumpeterian efficiency.¹¹

Table 1: IMS timeline for C-418/01 and C-481/01 PR

C-418/01	C-481/01
IMS sued NDC/AnZyx for copyright infringement	NDC complained to the Commission
Frankfurt District Court held for IMS	Commission held IMS has abused d. pos. (Decision 2001/165/EC)
Frankfurt Court referred questions to ECJ: Case C-418/01	IMS appealed to the CFI, the CFI suspended the Commission's order (T-184/01)
Frankfurt Court of Appeal held for NDC	ECJ confirmed CFI's decision in case C-481/01 P(R)
AG Tizzano delivered opinion	Decision 2002/165/EC withdrawn. END
ECJ affirms the role of switching costs. END	

¹¹ Schumpeter, J. (1942, reprint 1962) *Capitalism, Socialism and Democracy*, Harper Pennial, p. 395: "unless people see investment opportunities, they will not normally save and innovate, and that a situation of vanishing investment opportunity is likely to be also one of vanishing saving and innovation [for entrepreneurs]".

On the other hand, IMS argued that granting competitors access to the bottlenecked element would make its product generic. This would result in defeating IMS's effort in innovating its products. In this article, my argument is that this is not the case due to the difference between innovative and non-innovative markets. My argument is that when a market is non-innovative, the dominant position of an undertaking may give rise to an abuse, if such a position causes detriment to consumers by denying them the benefits they would have obtained in a competitive market. If the market is innovative, a dominant position must be combined with active anticompetitive conduct to give rise to an abuse. This assessment does not address certain product markets such as telecommunication, where although the markets are innovative, the Commission need not wait for an anticompetitive conduct before intervening. The mandate for intervention stems from Article 86 EC and not Article 82 EC.

1. Non-Innovative Markets Involving Intellectual Property Rights

Many authors, for example John Temple Lang, assume that consumers always demand new and innovative products.¹² This assumption is not always true. Pindyck and Rubinfeld, and Cooter and Ulen show that different consumers have different views on utilities and only they can define "consumer demand".¹³ By simply assuming that consumers always demand new products, a large number of consumers with low budgets can be excluded. Moreover, due to this 'innovation defence', an incumbent could claim that it needed intellectual property protection in order to 'innovate' simple works, such as television programs.¹⁴ On the other hand, suppose that the consumers do not only demand 'cheap' products but also innovative products, entrants could use the pretext of 'meeting the consumer demand' to free ride on the incumbent's fruits of innovation.

It is necessary to define the border between an innovative market and a non-innovative one, based on facts, rather than on the existence of intellectual property law. For this purpose, I define 'innovation' as a technical progress that meets

¹² Lang, J-T. (2002) Compulsory Licensing of Intellectual Property in European Antitrust Law. Presentation to the FTC/DOJ Hearing 1 May 2002, p. 30.

¹³ Pindyck, R. and Rubinfeld, D. (5th ed. 2001) *Microeconomics*, 75. Prentice Hall, Berkeley. Cooter, R. and Ulen, T. (3rd ed., 2000) *Law and Economics*, 24. Addison Wesley Longman, NY.

¹⁴ See Joined Cases C-241/91 and C-242/91, *RTE and others v Commission (Magill)* [1995] ECR I-743.

consumer demand, i.e. it increases social welfare. For such an innovation to emerge, competition authorities should look at the market to see whether the consumer's demands are for new products or cheaper products. In many cases, the answer is "both"; but in some cases, the answer is that "we only want the same product at a lower price." In the latter cases, the markets are no longer innovative, although innovation in production might still take place. When that is the case, competition is on price rather than on innovation (Viscusi *et al.*, 2001: 583).¹⁵

A number of markets could be qualified as non-innovative even when they involve intellectual property rights. In *Tetra Pak I*,¹⁶ the CFI rejected Tetrapak's argument that the market for milk filling machinery is an innovative one, although the machine is patented. The reason is that according to surveys among dairies in the market, the demand for innovation was low. Dairies had not changed their machines in 10 years, and milk had not been a growing market.¹⁷ Innovation is also not demanded in some markets for services (*Kodak* and *Hugin*) although they involve intellectual property rights.¹⁸ In *Magill*, a combined television guide was nothing 'new' in terms of intellectual property rights. This product has been a combination of obvious and simple ideas. By requiring a product to be 'new' whenever a case involved intellectual property rights (*Magill*, para. 52), the ECJ has created an impression that any market involving intellectual property rights is an innovative market. In *IMS Health v NDC* (Case C-418/01), IMS has used the *Magill* test to claim that to identify an abuse of dominant position, the entrant must supply a new product. This argument was implicitly rejected by the ECJ in its latest judgement (*IMS* C-418/01, para. 47) when the Court defines 'new' simply as 'non-duplicative'. In this situation, to request the entrants to provide an innovative product is absurd, because even the incumbent cannot fulfil this task. Consumers would not demand innovation if, as explained below, their demand in the market is constrained due to switching costs. Thus, this market may start as an innovative one but end as a non-innovative one.

¹⁵ Viscusi, W. Kip, Vernon, J. and Harrington, J. (2001, 3rd. ed.) *Economics of Regulation and Antitrust*. MIT Press, Cambridge.

¹⁶ Case T-51/89, [1990] ECR II-309. add case number.

¹⁷ Goyder, D. G. (2003, 4th ed.) *EC Competition Law*, 311. Oxford University Press.

¹⁸ *Hugin Kassaregister AB v Commission* [1979] ECR 1869, add case number: Hugin evokes its design rights to prevent Lipton, a servicing firm, from producing or acquiring Hugin's spare parts from other producers. *Kodak v Image Technical Services* (1992) 504 U.S. 451.

In the judgement dated 29 April 2004 of *IMS*, the ECJ recognised that the costs customers incurred on IMS data formats become a ‘financial obstacle’ for the entrant to enter the data market. However, the Court has failed to see that these costs have made consumers’ demand static and the relevant market becomes non-innovative. The ECJ still requires that the entrant who seeks access to an essential facility must provide a ‘new’ product not offered by the incumbent, without considering what might constitute a ‘new product’ in the market for regional sales data for pharmaceutical products.

By requiring the product offered by the entrant to be ‘new’, the ECJ assumes that anytime an undertaking uses intellectual property rights to control a non-innovative market, entrants should be locked-out, notwithstanding the demonstrable consumer detriment. IMS argued that licensing the data structure to NDC would cut off its only source of revenue.¹⁹ This argument has not denied that it is exploiting the economic rent from the consumers’ switching costs. In addition, this argument is not an excuse for a refusal to license where consumer detriment is at stake. At best, it may become a justification which allows IMS to charge a high royalty rate for the licence. By labelling any ‘downstream’ market involving intellectual property rights as ‘innovative market’, the Court readily assumes that the entrant is free-riding simply because it satisfies consumer demand in this market. Further analysis on the market characteristics is therefore desirable.

2. *IMS, Volvo*, Non-Innovative Market and Consumer Benefits

After analysing non-innovative markets in a general context, we will now apply this concept of non-innovative market to *IMS* and a related case, *Volvo v Veng*.²⁰ In both cases, the relevant markets are non-innovative. That is, consumers do not want a ‘new’ product, but a product that ‘must fit’ and ‘must match’ certain standards.²¹ In *Volvo*, the bottleneck was the design of the car’s front wing; in *IMS* it was the 1860 brick structure. If the cases are similar, the outcome should also be the same. Therefore, one question is why the Oberlandesgericht Frankfurt am Main has allowed IMS’s competitors to use the essential features of IMS’s data formats in selling their products, contrary to the earlier decision in *Volvo*. If we compare *Volvo* with *IMS*

¹⁹ In case T-184/01 R, IMS argued that if it must share its copyright, its service, painstakingly developed over many years, would be devalued into a generic offering indistinct from competing services.

²⁰ Case 238/87, [1988] ECR 6211.

²¹ See *British Leyland v Armstrong* [1986] 2 WLR 400.

from the perspective of the dominance—objective justification—abuse sequence, the difference is apparent.

Table 2: IMS and Volvo under the dominance-justification-abuse sequence

		<i>Cases</i>	
		<i>Volvo</i>	<i>IMS Health</i>
Dominance and consumer benefits	Relevant Markets	Spare parts	Pharmaceutical database
	Bottleneck	Design	Data format
	Consumer demand for new product?	Unclear	Yes
	Does the incumbent satisfy consumer demand?	Unclear	No (consumer demand for the entrant's products exist)
Justification	High sunk costs from innovation not yet recovered?	Unclear	No (the format exists since 1960s).
	Free riding entrants?	Yes	Unlikely (entrant is willing to pay for access).
Abuse	Abuse?	No	Likely

Volvo is different from *IMS* because the product of *IMS*'s competitor (NDC) can provide benefits to the consumers and has in fact attracted a number of customers in a short period of time.²² Such a benefit need not be present in a 'new' product, but simply in a 'better' product, either in price or in quality—depending on consumer

²² Decision 2001/165/EC, para. 20; *IMS*, Opinion of the AG, para. 39. In this case, NDC has proved that its product is in many respects better than *IMS*'s: there is a wider spectrum of data, on-line access is offered and the significant value of the data is greater, and they are presented in a more customer-friendly manner.

demand. As explained above, it is not difficult to produce a new pharmaceutical data format, but it is impossible to market a new one, as the market for pharmaceutical databases in Germany has become non-innovative and the consumers are only interested in a format compatible with IMS's. The difference, therefore, is that NDC has passed the 'dominance and consumer benefit' test, whereas Veng in *Volvo* had not. Had Veng proved that its product would reduce the price of spare parts for the consumers significantly, it would have passed this test.

As for the justification test, the incumbent in *Volvo* may have a legitimate concern on sunk cost recovery, whereas in *IMS* the 1860 brick structure has been developed in 1960s, and arguably a long enough timeframe to recover any R&D sunk cost in a data format. Similar arguments can be made about the risks from free-riding. Here IMS cannot raise the sunk costs argument. The cost of creating a data structure is small compared to the cost of collecting the data. IMS may not be able to prove that NDC and AnzyX are the free-riders because they are ready to pay licensing fees for using IMS's data structure. Similarly, it is unreasonable to ask NDC and AnzyX to be innovative in order to prove that they are not free-riders because the data structure is unchangeable, even for IMS, due to the large switching costs.

Another difference between *IMS* and other refusal to license cases is the lack of an upstream-downstream relationship.²³ Unlike *Volvo*, *IMS* has no upstream-downstream structure, thus the grant of access would directly affect the incumbent's core interests. Commenting this fact, Fine argues that the upstream-downstream structure that the ECJ has relied on so far was a fiction.²⁴ Although *Volvo* involves an upstream-downstream structure, it does not represent the only relevant circumstance.²⁵ In both *IMS* and *Volvo* cases, the interests of the incumbent are affected. In the judgement dated 29 April 2004 (C-418/01), the ECJ recognised the role of customers' investment in an incumbent's product in erecting consumers'

²³ See e.g. Lang, J-T. (2002) *Compulsory Licensing of Intellectual Property in European Antitrust Law*. Presentation to the FTC/DOJ Hearing 1 May 2002.

²⁴ Fine, F. (2002) "NDC/IMS: A Logical Application of the Essential Facilities Doctrine," 23 *ECLR* 457.

²⁵ See *Commercial Solvents* add case number [1974] ECR 223, para. 22: "An abuse of dominant position on [the essential facility] may have effects restricting competition in the market on which the derivatives of the [essential facility] are sold, ... even if the market for the derivative does not constitute a self-contained market."

barriers to exit (para. 30).²⁶ However, two of the three points raised above were not accepted by the ECJ, namely vertical integration and a non-innovative market. With respect to the justification test, the Court only briefly mentioned, in para. 51, that “it is for the national court to examine, if appropriate, in light of the facts before it, whether the refusal of the request for a licence is justified by objective considerations”. Unfortunately, this is a conclusion too vague to be helpful to national courts and businesses.

3. Vertical Integration Necessary for a Non-Innovative Market Case?

With respect to vertical integration, the Court still confirms its necessity, but it has stated that “it is sufficient that a *potential* market or even *hypothetical* market can be identified ... where the products or services are indispensable in order to carry on a particular *business* and where there is an actual *demand* for them on the part of [the entrants]” (*IMS*, C-418/01, CFI Judgement, para. 44). Unfortunately, this reasoning is difficult to follow. First of all, a market has to be defined by products and geographical area, not by a ‘business’. By accepting the ECJ’s logic, we would be forced to conclude that a market for operating systems can be subdivided into many markets depending on the businesses (i.e., the functions) that an operating system offers. Secondly, the demand that constitutes a market is the consumer demand, not the entrant’s demand (see *Hugin v Commission* [1979] ECR 1869, para. 5; *Magill*, para. 52). Thirdly, if a market is identified even if it is ‘potential or hypothetical’, only for the sake of the vertical integration requirement, can we say that the requirement itself is a fiction? Moreover, the Court further requires the entrant to show that the refusal to license is ‘capable to eliminate all competition’ on a secondary market—a condition not asked by the Oberlandesgericht Frankfurt am Main (see C-418/01, paras. 17 and 47). This condition does not solve the issue at hand: detriment to consumers.

In *IMS*, the ECJ has defined the relevant market as the market for ‘German regional sales data for pharmaceutical products’ (*id*, para. 46). However, this is the same and the only market that *IMS* was involved in, and is the subject matter of the case. How then can we say that NDC products are new in this market? The Court has given no answer, leaving this impossible task to the German court. My argument is that the essence of vertical integration is in the concept of leverage of market power,

²⁶ I have argued before that the ECJ should pay attention to switching costs. If this factor is taken into account, the consumer detriment would be readily demonstrated and *IMS*’s conduct would be held anticompetitive.

but such a power can also be leveraged by a hidden tactic: instead of controlling a market, the dominant firm controls a crucial component in the market. The change of tactic does not change its effect: elimination of competition by maintaining consumers' high switching costs. Without focusing on the fundamental issue, both the EFD and the leverage theory may become inflexible in adapting to the change in circumstances. This inflexibility has caused confusion. Prior to the judgement, AG Tizzano said that "refusal to license may be deemed abusive only if ... [the entrant] intends to produce goods or services of a *different nature* which, *although in competition* with those of [the incumbent], answer specific consumer requirements not satisfied by [the incumbent]" (*IMS*, Opinion of the AG, para. 62). The emphasised words of this sentence conflict each other. How could the entrant's goods or services compete with the incumbent's ones, if the former are of different nature from the latter? If one product is in the upstream market and another product is in the downstream one, as the Court believes a case of refusal to license case should be, then these products cannot compete with each other.

Admittedly, when the incumbent and the entrants are competing in the same market, granting access to the bottleneck may increase the risks of not recovering the sunk costs. However, high risks do not result from denial of access. The only issue is whether the risks are adequately addressed. The ECJ may consider striking a balance between the future risks to the incumbent and the current detriment to consumers to see which is larger. In a non-innovative market, such as *IMS*, such risks of not recovering sunk costs seem to be less probable than in an innovative market.

Conclusion

The main argument in this article is that not all markets involving intellectual property rights are innovative markets. Many of them are non-innovative markets, as the case *IMS* shows. In such a market, consumer demand for innovation is insignificant. However, it is not that such a consumer demand does not exist, but because the consumers in this market have incurred unrecoverable costs in time and money to collect data and store them in a particular format.²⁷

²⁷ The sunk costs spent by consumers on an old product are called switching costs. For further discussion on this topic, see N. Le (2004) "Microsoft Europe and Switching Costs" *World Competition* No. 4.

Furthermore, I argue that when a market becomes non-innovative, the following may be observed:

- The argument on incentives for innovation of the incumbent would become less important than it was when the market was an innovative one.
- Consumer benefits are measured by price and other non-innovation factors rather than innovative efforts, and thus can be more simply quantified. The entrant that desires to bring benefits to consumers, which consumers cannot obtain otherwise, should be able to be granted access to the bottleneck.
- It is not necessary for a case involving a non-innovative market to show another upstream or downstream market to show that a refusal to license a bottlenecked element may result in an abuse of dominant position. The reason is that consumers would be locked-in by the bottleneck itself, not necessarily by the existence of an upstream market. In this case, there is no demand for innovation in the essential facility.