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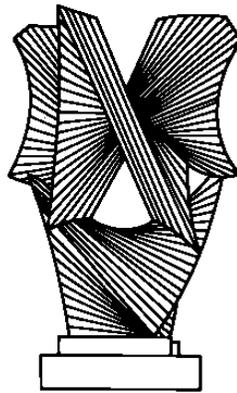
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Unbundling Scope-of-Permission Goods: When Should We Invest in Reducing Entry Barriers?

*Randal C. Picker**

Bundling has emerged as one of the great competition policy issues of the day. For the last eight years, it has been the defining issue in U.S. telecommunications, as the FCC has attempted, so far unsuccessfully, to implement the unbundled network elements (UNEs) regime contemplated by the Telecommunications Act of 1996.¹ The UNE regime is intended to foster entry and to lead to facilities-based competition.² Questions of the permitted scope of bundling, tying and integration have been critical in the government actions against Microsoft in both the U.S. and Europe.³ And in as ordinary a market as that for Scotch tape—oops, as that for transparent tape, as 3M is quick to tell us that Scotch tape is a trademarked brand of transparent tape⁴—we have encountered bundling issues sufficiently complex that the Antitrust Division of the Department of Justice asked the U.S. Supreme Court to decline to hear the appeal from the Third Circuit’s en banc decision in *LePage’s Inc. v. 3M (Minnesota Mining and Manufacturing Co.)* (it did).⁵

* Copyright © 2004, Randal C. Picker. All Rights Reserved. Paul and Theo Leffmann Professor of Commercial Law, The University of Chicago Law School and Senior Fellow, The Computation Institute of the University of Chicago and Argonne National Laboratory. I thank Ryan Foreman for able research assistance and the Paul Leffmann Fund, the Russell J. Parsons Faculty Research Fund and the John M. Olin Program in Law and Economics at The University of Chicago Law School for their generous research support, and through the Olin Program, Microsoft Corporation and Verizon. I did some consulting work for Sun Microsystems in its eventually-settled private antitrust action against Microsoft.

¹ Telecommunications Act of 1996, Pub L No 104-104, 110 Stat 56 (1996), §§ 251-52, as codified at 47 USC §§ 251–52 (2002); *AT&T Corp v Iowa Utilities Board*, 525 US 366 (1999) (overturning first set of FCC rules); *Verizon Communications v Federal Communications Commission*, 535 US 467 (2002); *United States Telecom Ass’n v FCC*, 290 F3d 415 (DC Cir 2002) (overturning second set of FCC rules); *United States Telecom Ass’n v FCC*, 359 F3d 554 (DC Cir 2004) (overturning third set of FCC rules). For discussion, see Douglas Lichtman and Randal C. Picker, *Entry Policy in Local Telecommunications: Iowa Utilities and Verizon*, 2002 Sup Ct Rev 41 (2003).

² Whether that is a good idea is a point I consider elsewhere. See Randal C. Picker, *Entry, Access and Facilities-Based Competition* (working paper 2004).

³ *United States v Microsoft Corp*, 253 F3d 34 (DC Cir 2001) (en banc) (unanimously affirming district court finding of illegal monopoly maintenance under Section 2 of the Sherman Act but remanding for rule of reason consideration of the question of whether Microsoft had impermissibly tied Internet Explorer to Windows); Commission of the European Communities, Commission Decision of 24.03.2004 (COMP/C-3/37.792 Microsoft) (finding an abuse of a dominant position in refusing to disclose certain interoperability information for servers and in conditioning acquisition of Windows on simultaneous acquisition of the Windows Media Player) (“EU Commission Decision”). For my views on the most recent U.S. antitrust case against Microsoft, see Randal C. Picker, *Pursuing a Remedy in Microsoft: The Declining Need for Centralized Coordination in a Networked World*, 158 J Inst Theor Econ 113 (2002).

⁴ <http://www.3m.com/about3m/student/scotchbrand4/>.

⁵ 324 F3d 141 (3d Cir. 2003) (en banc) (declining to overturn jury verdict against 3M relating to 3M’s bundled rebates

I want to try to carve off a piece of the bundling question, namely that relating to what I will call “scope-of-permission” goods. Start with a related idea: private public goods. These are goods for which exclusion is possible but my consumption of the good does not impair your consumption of the identical good. Scope-of-permission goods take that idea and add more, namely, we deliver precisely the same good to each individual but define multiple products through the scope of access—through the scope of permission—that the producer gives to each consumer. Equivalently, we can arbitrarily define multiple products by adding and subtracting features and give individuals different levels of access by giving them the different arbitrarily-defined products.

As I detail below, scope-of-permission goods naturally include pay TV, computer software, copyrighted works and licenses from collective right collectives such as ASCAP and BMI. In picking up ASCAP and Microsoft, we encounter some of the oldest pending and most recent cases in antitrust, though, somewhat surprisingly, both cases turn on the same question: when should we invest in reducing entry barriers? In both cases, the chosen structure of the scope-of-permission good—the blanket licenses in ASCAP and the design of Windows—creates entry barriers, barriers to competing performing rights organizations in the case of ASCAP and barriers to competing browsers and now media players in the case of Microsoft.

The critical issue is the extent to which we are willing to re-engineer these scope-of-permission goods—to re-scope them—to enable entry. With the entry of a new judgment in the ASCAP case—the original judgment was entered in 1941 after six years of investigations—the final resolution of the U.S. case against Microsoft and the European Commission’s decision in its proceeding against Microsoft (now on appeal to the European Court of First Instance), we have chosen three different approaches to re-engineering scope-of-permission goods to foster entry.

In ASCAP, we have re-scoped by subtracting from the scope of the blanket license and have imposed a pricing consistency provision between the blanket license and the newly-required sublicenses with the hope of creating entry by competing copyright col-

program), cert den 2004 US LEXIS 4768 (June 30, 2004); see also Brief for The United States as Amicus Curiae (available at <http://www.usdoj.gov/atr/cases/f203900/203900.pdf>). For discussion, without having to leave the pages of this *Law Review*, see Richard A. Epstein, *Monopoly Dominance or Level Playing Field? The New Antitrust Paradox*;

lectives. In the U.S. Microsoft case, we again have reduced the scope of the permission good by giving computer sellers the right to hide the visible means of accessing parts of Windows, including, most relevantly, the Windows Media Player (WMP). In the EU Microsoft case, we have gone a step farther by requiring Microsoft to engage in what I have called elsewhere mandatory versioning,⁶ requiring Microsoft to create versions of Windows with and without the WMP. Again, we have done this by reducing the scope of the product with the hope of facilitating entry in the media player market. But we may have missed an opportunity to do better, this time re-scoping through addition rather than subtraction, by imposing a must-carry remedy on Microsoft.

I. Understanding Scope-of-Permission Goods

To understand the idea of a scope-of-permission good (or more shortly, sometimes, a permission good), work quickly through a taxonomy of goods. Contrast private goods with public goods. Private goods are defined by rivalry in consumption: if I eat the muffin for breakfast, you can't. Public goods are defined by the absence of rivalry in consumption: my enjoyment of our national defense protection does not prevent you from enjoying it as well.

We can also speak, perhaps cutely but also with meaning, of “public” public goods and “private” public goods. We want to add to rivalry a second dimension to the analysis, namely, the idea of excludability. Public public goods are nonrivalrous goods as to which it is impossible to exclude anyone from consumption. National defense remains a good example: it is impossible to protect me with an anti-ballistic missile system and not protect you as well. As the name suggests, absent charitable impulses, we should expect little private provision of public public goods and instead will need to rely on the compulsion of taxation to finance their provision. In contrast, if we add excludability to nonrivalry, we have the possibility of private public goods: public goods that will be privately provided and privately financed. Pay TV is a classic example of the private public good.⁷

Herbert Hovenkamp, *Exclusion and the Sherman Act*.

⁶ Picker, 158 J Inst Theor Econ at 115 (cited in note 3).

⁷ Harold Demsetz, *The Private Production of Public Goods*, 13 J Law & Econ 293 (1970).

Nonrivalrous consumption plus excludability defines the private public good. To get to scope-of-permission goods, take that idea and add more, namely, we deliver precisely the same good to each individual but define multiple products through the scope of access—through the scope of permission—that the producer gives to each consumer. Again, we could instead arbitrarily set the scope of different versions of the product and give different individuals different products. As discussed below, the key attribute that makes possible scope-of-permission goods is that the marginal cost of creating and distributing increments to the goods in issue is zero. So nonrivalry, plus excludability plus zero marginal cost equals a scope-of-permission good.

I should make that concrete, so consider three examples.

Pay TV. The same satellite TV signal is delivered to each house in the continental U.S. This is not about delivery of the product; instead, the question is how we structure access to the signal and the scope of permissions that are provided. Satellite TV is delivered encrypted, so that access is given by giving the end-user the key to unlock the content. Encryption is the way in which we prevent this private public good from turning into a public public good.⁸ Cable TV operates in the same fashion. The same content passes each house, but the scope of permission determines whether you get cable at all, basic cable, enhanced cable or any of its variants.

The current brouhaha in cable concerning a la carte pricing is precisely about who should get to define how permission is given. In an a-la-carte pricing regime, consumers would be able to buy individual channels and assemble a bundle channel by channel. Separate prices would be set for each channel and the consumer would pay just the sum of the individual channel prices. Some consumer groups believe that a-la-carte pricing would reduce prices paid by consumers for cable, while conservatives support a-la-carte pricing as a simple way for consumers to get “good” content (the Disney channel), while keeping out garbage (MTV).⁹

⁸ Encryption and an assortment of litigation. See, eg, *DirecTV, Inc. v Treworgy*, 373 F3d 1124 (11th Cir 2004) (rejecting DirecTV’s attempt to assert a private right of action under 18 USC § 2520(a) regarding criminal possession of hardware that make it possible to capture illegally satellite transmissions).

⁹ *Consumer Groups Say Cable a la Carte will Ease Prices, Expand Choices for Customers*, Consumers Union, Press

Computer Software. Computer software is frequently distributed in a scope-of-permission framework. The program comes in two versions, a basic version which may even be free and a full-featured version for a price. But we are not talking about two different products in the way that a single doughnut is different from a dozen doughnuts. The actual software delivered may be identical for both the basic and full-featured versions. An end-user upgrades from the basic version by paying a fee and receiving a password to unlock the additional features. This strategy should not be confused with a two-part software strategy, such as that used by Adobe Acrobat. Adobe gives away the reader program to generate sales of its authoring program. The size of the installed base of readers affects the value of the authoring program. In contrast, scope-of-permission software is valuable independent of the choices made by other users, the only question is whether the user has access to the full feature set of the software or more limited access to a so-called “crippled” version of the software.

Copyrighted Works. Copyrighted works are the quintessential scope-of-permission goods. We define slices of rights that make up the bundle of rights associated with a copyrighted works. We distinguish the right to copy a work from the right to distribute that work, the right to perform a work from the right to display a work publicly.¹⁰ We distinguish sale of a physical instantiation of the work from the work itself: J.K. Rowling doesn’t transfer her copyright in her most recent Harry Potter novel when she sells a hardback copy of it.¹¹ For copyrighted works, these lines are critical. If the sale of one music CD empowered the purchaser to enter the business of music distribution for that CD—thereby creating a full-blown competitor—music sales would be altered forever. An intelligent system of copyright unbundles these rights so as to make it possible to sell just a song and not also sell the right to redistribute that song. As I describe below, li-

Release (Aug 18, 2004) (available at http://www.consumersunion.org/pub/core_telecom_and_utilities/001314.html); *PTC Asks Congress to Support A La Carte Cable Programming*, Parents Television Council, Press Release (Mar 25, 2004) (available at <http://www.parentstv.org/ptc/publications/release/2004/0325.asp>).

¹⁰ 17 USC § 106.

¹¹ 17 USC § 202.

censes from copyright collectives such as ASCAP and BMI also fit in this framework.

The key attribute that makes possible scope-of-permission goods is that the goods in issue are zero marginal cost goods. Once an attribute is created, there are no real marginal costs to bundling together a very large number of attributes. This means that there are few, if any, natural limits on product scope. What function shouldn't be in Windows? Don't ask why Microsoft bundles so much into Windows: ask why does Microsoft bundle so little? Why is Microsoft Office a distinct product from Windows?

For contrast, consider how we might sell fruit. We have five kinds of fruit: apples, oranges, bananas, pears and grapefruit. Consumers value the right piece of fruit at \$5, the wrong piece of fruit at zero. Each consumer just wants one piece of fruit, and each piece of fruit costs \$1 to produce. A seller who assembled a fruit basket consisting of one piece of each fruit would incur costs of \$5 and yet could sell the fruit basket for just \$5 and would make zero profits. Four pieces of fruit would be wasted in each transaction. The marginal cost of each piece of fruit naturally points to a definition of the scope of the product, here the individual piece of fruit.

But there is no corresponding limit for software or television channels. Yes, that overstates slightly. Pay TV systems have capacity constraints, a maximum number of channels that can be pushed through the cable or sent over the satellite. Additions to capacity might be quite expensive and would come in lumps. But for a given system design, until the capacity constraint is reached, we can distribute another channel at very low cost. Software CDs are also subject to capacity constraints, though those are becoming less important as we move towards network distribution of software.

And there is another important reason to "grow" product scope when the marginal cost of doing so is zero. The fact that goods can be added at zero marginal cost means that we do not need to try to identify consumer demand and tailor the delivered product to that demand. Instead, we could just offer the consumer everything and allow the consumer to choose what she wants. This strategy may lower costs, as the seller does not need to offer many differentiated products. Moreover—and now we step ever so briefly into the world of mathematics—with consumers being likely to have different values for

different parts of the product, the larger the number of attributes bundled together in a single product, the more that the aggregate demand by each consumer for the entire product converges to a single value.¹² If that happens, a seller with monopoly power may be able to extract more money from consumers by expanding the scope of the product.

II. ASCAP: Subtracting from Scope-of-Permission Goods

U.S. copyright law vests a separate exclusive right in copyright owners to perform copyrighted works publicly.¹³ The American Society of Composers, Authors and Publishers (ASCAP) was organized in October, 1913 to create a way for music composers to vindicate their copyrights in music performed—live, of course as there was no alternative—in restaurants, dance halls and the like. ASCAP’s early days were devoted to litigation: restaurants contended that no payment was required when the music was not performed for profit, plus the piano player in the corner was just contributing to ambience in the way that a potted plant might.¹⁴ In 1917, the Supreme Court, though Justice Holmes, quickly put that idea to rest—in a brief three-page opinion—and ASCAP was off to the races.¹⁵

To the movies actually and then on to other forms of mass entertainment, as in 1922, two-thirds of ASCAP’s revenues came from licenses to movie theaters. This was from live music played to accompany silent films (Jolson’s *The Jazz Singer*, the first big talkie, wasn’t until 1927).¹⁶ ASCAP followed the music, from the silent films to the sound era and then on to radio.

ASCAP shaped entry through its policy of issuing only blanket licenses for the music in the ASCAP repertory. The blanket license gave the recipient the right to play any song

¹² Yannis Bakos and Erik Brynjolfsson, *Bundling Information Goods: Pricing, Profits, and Efficiency*, 45 *Management Sci* 1613 (1999).

¹³ 17 USC § 106(4).

¹⁴ Paul Goldstein, *Copyright’s Highway: From Gutenberg to the Celestial Jukebox* 54-57 (revised ed. Stanford Univ Press 2003) (*Copyright’s Highway*). For additional discussion of copyright collectives, see Robert P. Merges, *Contracting Into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 *Calif L Rev* 1293 (1996); Stanley M. Besen, Sheila N. Kirby and Steven C. Salop, *An Economic Analysis of Copyright Collectives*, 78 *Va L Rev* 383 (1992).

¹⁵ *Herbert v Shanley Co*, 242 US 591 (1917).

¹⁶ John Ryan, *The Production of Culture in the Music Industry* 23-24 (University Press of America 1985) (*Production of Culture*).

registered with ASCAP. The fee for use did not depend on which songs were used or how frequently they were played, though prior to 1932, ASCAP did set license fees based on the number of hours in which the radio station broadcast ASCAP music. After 1932, ASCAP dropped that policy and switched to fees tied to a percentage of the station's annual income.¹⁷

This switch matters for entry. Under the old scheme, a radio station could drop ASCAP songs entirely for an hour, reduce its payments to ASCAP and substitute in other songs. With fees tied to annual revenues—and wholly independent of actual use—the radio station received no financial benefit from substituting to non-ASCAP songs. Indeed, if the alternative provider wanted to get paid, the radio station's fees would go up. This point was apparent to the U.S. Department of Justice in 1935:

If a non-member copyright owner came into the station with the most beautiful composition of the day trying to get the station to perform it, he would not even get an opportunity of having it tried out. This is for the reason that there is no incentive on the part of the station as a result of the licensing requirements since the station must pay the Society whether the Society's music is used or not and the station's music requirements can be satisfied by Society music.¹⁸

So what entry is being thwarted exactly? Entry into the music composition business? Perhaps, but not obviously. ASCAP opened its arms to all composers. Although there have been claims that ASCAP's formula for distributing its revenues favors older incumbents,¹⁹ it isn't clear that that is factually accurate, and it would hardly be surprising if these royalty nuances were lost on budding songsters. But ASCAP's annual-revenues blanket license blocked entry by competing performing rights organizations (PROs). A PRO entrant who sought to sign up composers would struggle, as all would recognize that the radio station would be stuck with its set fee to ASCAP, unless the station could drop ASCAP music entirely.

Yet we did get entry by a competing rights organization in 1939. How? The radio broadcasters got into a major fight over fees with ASCAP in negotiating new licenses to

¹⁷ Id at 37.

¹⁸ Id at 46.

¹⁹ *Disharmony in the Air*, NY Times 110 (Aug 11, 1940).

replace those set to expire at the end of 1940.²⁰ The radio broadcasters were paying 5% of their net receipts on commercial programs to ASCAP, but ASCAP wanted to boost that number to 7.5%.²¹ In contrast, the radio broadcasters didn't want to pay anything for programs where no ASCAP music was used, moving towards a per-program license.²² To boost their position, in September, 1939, the radio broadcasters vertically integrated and set up a competing rights organization, Broadcast Music, Inc.²³ Of course, ASCAP had locked up most music thought to be of interest to the American public, and so BMI was forced to look to music in the public domain—Mozart and Beethoven—and to chase new artists and music that had been traditionally shunned by ASCAP, “hillbilly” and “race” music.²⁴

The emergence of an organized radio group meant that two strong groups were negotiating with each, a bilateral monopoly. Radio needed music, and ASCAP needed access to radio. When the ASCAP radio licenses expired on January 1, 1941 and ASCAP songs vanished from the airwaves, the question was who would blink first. Or perhaps whether the government would jump in, as indeed it did.

On December 26, 1940, the Department of Justice, which had been nosing around ASCAP for the better part of six years looking for antitrust violations, announced that it would launch new criminal antitrust proceedings after the first of the year against ASCAP, BMI, NBC and CBS. BMI, barely a year old, was caught in the six-year old fight between ASCAP and the Department of Justice, and NBC and CBS, which owned roughly one-sixth of BMI, were swept up as well.²⁵

But BMI certainly realized that it could turn the antitrust threat to its advantage in a form of raising rival's costs. BMI settled quickly with the government and agreed to adhere to precisely the provision that the radio broadcasters had been seeking in their negotiations with ASCAP. The “pay-when-you-play” provision stipulated that the license fee for the use of the rights controlled by BMI could not be tied to revenues for any

²⁰ T.R. Kennedy, *The Case of ASCAP v BMI*, NY Times 158 (Dec 15, 1940) (*Case of ASCAP*).

²¹ *Public Seen As Judge*, NY Times 22 (Dec 17, 1940).

²² *Id.*

²³ Goldstein, *Copyright's Highway* at 59 (cited in note 14).

²⁴ *Case of ASCAP*, NY Times 158 (cited in note 20); Ryan, *Production of Culture* at 1-2 (cited in note 16).

²⁵ Turner Catledge, *ASCAP, Radio Chains to be Prosecuted as Music “Trust”*, NY Times 1 (Dec 27, 1940).

for the use of the rights controlled by BMI could not be tied to revenues for any programs in which no BMI music was used and was consistent with BMI's core method for paying composers when music was played.²⁶ And with BMI on board, there was little reason for the government to continue to pursue NBC and CBS.

In contrast, ASCAP was in a tough spot with ASCAP songs off the airwaves and a looming criminal antitrust proceeding against ASCAP.²⁷ With yet another round of failed settlement talks,²⁸ the Department of Justice filed a criminal information in a federal court in Milwaukee on February 5, 1941, with the arraignment set for March 5th.²⁹ Finally, with the full weight of the federal government bearing down, ASCAP faced the music—who could resist—and agreed to a settlement tracking the government's prior settlement with BMI.³⁰ Most importantly—at least one would have thought—ASCAP agreed to license songs on a per program basis with fees tied to the revenues of that particular program.

That said, the president of ASCAP, Gene Buck, believed that the blanket license would continue to be widely used because of the “economy in bookkeeping” associated with it.³¹ And with the government case settled, in late July, 1941, ASCAP and the broadcasters agreed on revised fees for licensing. The broadcasters had been paying 5%, ASCAP sought 7.5% and the new deal settled on 2.75%.³² With much work, including the creation of BMI and taking ASCAP songs off the air for seventh months, the broadcasters had won (though ASCAP's revenues grew quickly as radio itself expanded).³³

But won what? Certainly as to basic royalty rates. As to the blanket license, Gene Buck was right. The consent decrees were reworked in the 1950s and 1960s but the blanket license continued to be the dominant mode of licensing music. When CBS sued

²⁶ *B.M.I. Averts Suit By Consent Decree*, NY Times 22 (Jan 28, 1941); *United States v Broadcast Music, Inc.*, 1940-43 Trade Cases ¶ 56,096 (ED Wis 1941); Jack Gould, *Radio Music Dispute Raises Complex Issues*, NY Times E10 (Feb 9, 1941).

²⁷ *ASCAP Will Confer with US on Decree*, NY Times 23 (Feb 4, 1941).

²⁸ *ASCAP Split Halts Washington Trip*, NY Times 17 (Feb 5, 1941).

²⁹ *ASCAP is Accused in Anti-Trust Suit*, NY Times 17 (Feb 6, 1941).

³⁰ *United States v American Society of Composers, Authors and Publishers*, 1940-1943 Trade Cases ¶ 56,104 (SDNY 1941); *ASCAP to Sign Pact Ending Trust Suits*, NY Times 1 (Feb 20, 1941).

³¹ *Id.*

³² *ASCAP Near Pact with NBC Chain*, NY Times 19 (Jul 31, 1941).

ASCAP and BMI in 1975 alleging that the blanket licenses offered by ASCAP and BMI were *per se* violations of the Sherman Act, CBS and the other television networks had taken blanket licenses only since 1946.³⁴

CBS alleged illegal price fixing, unlawful tying, a concerted refusal to deal, and misuse of copyrights. ASCAP and BMI won in the district court, but on appeal to the Second Circuit, the court held that the blanket license constituted *per se* illegal price fixing. What remedy did CBS want? The Second Circuit identified a central problem of the blanket license and a possible solution:

Our objection to the blanket license is that it reduces price competition among the members and provides a disinclination to compete. We think that these objections may be removed if ASCAP itself is required to provide some form of per use licensing which will ensure competition among the individual members with respect to those networks which wish to engage in per use licensing.³⁵

This is a distinction between collective policing and collective price-setting. There may be substantial merit in collectivizing the enforcement of copyrights, but it isn't clear, especially today, that collective pricing must come with collective policing,³⁶ a point that the Supreme Court should have been more sensitive to in rejecting CBS's *per se* claims. Not that the Court should have upheld those claims: this is clearly a complex situation and we should not engage in a truncated *per se* analysis. More to the point is that the new-product rationale framed by the Court in justifying a move to rule of reason analysis—"[h]ere, the whole is truly greater than the sum of its parts; it is, to some extent, a different product"³⁷—while right takes too little into account that any number of new products might have been created; the right question is which products are created and why.

That gets us back nicely to the scope-of-permission good framework and the most recent iteration of the government's 60-year old case against ASCAP. The core issue here

³³ Goldstein, *Copyright's Highway* at 60 (cited in note 14).

³⁴ *Broadcast Music, Inc v Columbia Broadcasting System, Inc*, 441 US 1, 12 (1979).

³⁵ *CBS v ASCAP*, 562 F2d 130, 140 (2d Cir 1977) (footnotes omitted).

³⁶ Ariel Katz, *The Potential Demise of another Natural Monopoly: New Technologies and the Future of Collective Administration of Copyrights* (working paper 2004) (available at <http://law.bepress.com/cgi/viewcontent.cgi?article=1034&context=alea>).

³⁷ *Broadcast Music*, 441 US at 21-22 (cited in note 34).

has always been about what licenses ASCAP offered and whether it offered a meaningful alternative to the blanket license. This was what the radio broadcasters were seeking when they formed BMI in 1939 and what CBS continued to seek when it brought its private antitrust action against ASCAP and BMI in 1975.

On June 11, 2001, a seconded amended final judgment (“SAFJ”) was entered in the ASCAP case supplanting the original judgment entered on March 4, 1991 (as amended in the interim).³⁸ According to the government, the point of the SAFJ is to provide “genuine alternatives to a blanket license” with the hope of “encouraging competition among PROs” and “encouraging competition between ASCAP and its members to license performances of the members’ works.”³⁹ As this of course was the point of the original final judgment, it is hard to know whether the longevity of the blanket license is a testament to its efficiency, to ASCAP’s market power or to the difficulties of court-implemented regulation.

The SAFJ does contain a new provision—optimistically labeled “Genuine Choice”—which imposes a pricing consistency requirement on the blanket license.⁴⁰ Think of one radio station taking the blanket license and the corresponding fees to ASCAP. Imagine if that radio station took a per-program license—one of the sub-licenses called for by the SAFJ—for *each* of its programs. From a use standpoint, that would be equivalent to having a blanket license. The Genuine Choice provision requires that the total fees due from the set of per-program licenses approximate those for the blanket license.

The core idea here is to make it possible for a radio station to reduce how much it pays ASCAP and BMI when it reduces its use of their music, to make it possible to substitute in music from another source, and in turn encourage entry and competition in the provision of music by copyright collectives. The blanket license separates use decisions from price, a virtue given the public-good nature of music compositions, plus the blanket license removes any concern about needing to monitor use for possible infringements

³⁸ *United States v American Society of Composers, Authors and Publishers*, 2001-02 Trade Cases ¶ 73,474 (SDNY 2001).

³⁹ *United States v American Society of Composers, Authors and Publishers*, *Memorandum of the United States in Support of the Joint Motion to Enter Second Amended Final Judgment* (Sep 4, 2000) at 4 (available at <http://www.usdoj.gov/atr/cases/f6300/6395.htm>).

⁴⁰ ASCAP, 2001-02 Trade Cases at 91,961-62 (cited in note 38).

(but still leaves reason to monitor to determine how to split up the ASCAP pie). But the blanket license blocks entry in copyright collectives and may facilitate collusion among music composers. The monitoring benefits of the blanket license might be mitigated through a sampling and penalty structure (spot check for violations and hit infringers with big fines). If that is right, the remaining question, yet to be answered, is whether the transaction costs associated with defining the new licenses are worth the competitive benefits associated with new entry from other copyright collectives.

III. Microsoft and Scope-of-Permission Goods: Subtracting When We Should Have Been Adding?

The Microsoft antitrust cases emphasize the importance of how access and permission are organized. For more than a decade, Microsoft has been the Great White Whale of antitrust. To recap quickly, in 1994, Microsoft entered into settlements with the United States and the European Commission concerning Microsoft's practices for licensing its then dominant operating system, MS-DOS. Prior to the settlement, Microsoft was using lump-sum licensing and per-processor licensing.⁴¹

Under lump-sum licensing, Microsoft charged an original equipment manufacturer (OEM) a flat amount for access to DOS independent of the number of copies that the OEM placed on the computers that it sold. Under per-processor licensing, the amount that the OEM paid Microsoft for access to DOS was calculated based on the number of computers that the OEM sold, again independent of whether the OEM actually placed a copy of DOS on the sold computer. Note that under both licenses, the amount that the OEM paid was independent of how the OEM actually used DOS. The key difference between the two approaches to licensing was how sales risk was allocated between Microsoft and the OEM. Under lump-sum licensing, an OEM might sell few computers and effectively end up paying a high cost for each copy of DOS; the per-processor license eliminated that risk.

The lump-sum and per-processor licenses are good examples of scope-of-permission goods. Each OEM received the same "product," a master copy of DOS: the only question

⁴¹ *United States v Microsoft Corp*, 56 F3d 1448, 1451-52 (DC Cir 1995).

was how that copy could be used and how the use was to be paid for. The core structure of the lump-sum and per-processor licenses was simultaneously virtue and vice. Once DOS was created, no resources were expended in each additional use of the product. And under the licenses, Microsoft didn't charge an additional fee for each additional copy of DOS used. The lump-sum license was a flat amount, independent of the number of copies used, and the per-processor license linked the payment fee for DOS to the number of computers sold rather than the number of copies of DOS that were distributed.

So we might think that Microsoft cleverly matched the social costs of the next use—zero—with the fee charged for the next use—zero—and still came up with a scheme for recovering the substantial fixed costs of software development. So what is the problem? The problem, perhaps, is that there is an additional social cost of this licensing structure, namely that it creates a substantial barrier to entry, a barrier that would not exist in a licensing scheme that required a per-copy cost for each copy of DOS. Think of this as a competition cost of the scope-of-permission structure defined by the lump-sum and per-processor licenses.

The settlement—entered in the U.S. only after the D.C. Circuit booted the district court judge from the case⁴²—required Microsoft to shift to per-copy licenses.⁴³ And the settlement also barred contractual tying of products to the operating system, but with the proviso that “this provision in and of itself shall not be construed to prohibit Microsoft from developing integrated products.”⁴⁴ That clause was heavily negotiated⁴⁵ and formed the basis for the next round of U.S. litigation. When the Internet exploded, Microsoft moved to add its web browser, Internet Explorer, to Windows. Whether doing so violated the 1994 settlement is a nice question—and the subject of a 2-1 decision in the D.C. Cir-

⁴² *United States v Microsoft Corp*, 56 F3d 1448 (DC Cir 1995).

⁴³ For analysis of the settlement, see Richard J. Gilbert, *Networks, Standards and the Use of Market Dominance: Microsoft (1995)* in John E. Kwoka, Jr. and Lawrence J. White, *The Antitrust Revolution: Economics, Competition and Policy* (3rd ed. Oxford Univ Press 1999); see also Ina Fried, *Microsoft's 1994 consent decree: Boon or bust?*, CNet News.com (Jul 9, 2004) (available at http://news.com.com/2100-1016_3-5262600.html).

⁴⁴ *United States v Microsoft Corp*, 1995-2 Trade Cases ¶ 71,096 (DDC 1994) (section IV(E)(i)).¶

⁴⁵ Wendy Goldman Rohm, *The Microsoft File: The Secret Case Against Bill Gates 191-95* (Random House 1998).

cuit holding that it did not⁴⁶—but one that quickly became irrelevant once the U.S. government filed a broad new antitrust complaint against Microsoft.

In the new case, the district court found Microsoft guilty of illegal monopoly maintenance relating to many of Microsoft's actions against the entry threat posed by Netscape Navigator. The court also characterized the same actions as attempted monopolization of the web browser market. And Microsoft was found to have illegally tied Internet Explorer to Windows.⁴⁷ The district court concluded that Microsoft should be split into two independent companies, an operating system company and an applications company (organized around Microsoft Office).⁴⁸

On appeal, the D.C. Circuit, en banc and unanimously, upheld the finding of monopoly maintenance, but overturned everything else. The court found that the lower court had erred in considering the tying claim under a *per se* analysis and instead held that rule of reason analysis was required for the complicated questions of tying and software integration at issue in the case. The court also found that the government had failed to specify a meaningful browser market, and *a fortiori*, had therefore failed to make out a successful claim of attempted monopolization of that market.⁴⁹

On remand—to yet another district court judge, as federal district court Judge Thomas Jackson had been bounced for talking to the press when he should not have—the Antitrust Division dropped the tying claim and moved forward to pursue a remedy for the remaining monopoly maintenance finding. Microsoft, the United States and certain of the individual States reached an agreed remedy, and that remedy, described in part below, was ultimately upheld by the D.C. Circuit on June 30, 2004 in its Tunney Act review.⁵⁰

At the same time that the U.S. case was working its way up and down the court system, the European Commission was conducting a parallel investigation of Microsoft's practices with a focus on the bundling of Windows Media Player with Windows and the interaction between Windows and computer servers. The Commission announced its re-

⁴⁶ *United States v Microsoft Corp*, 147 F3d 935 (DC Cir 1998).

⁴⁷ *United States v Microsoft Corp*, 87 FSupp2d 30, 35 (DDC 2000).

⁴⁸ *United States v Microsoft Corp*, 97 FSupp2d 59, 64 (DDC 2000).

⁴⁹ *United States v Microsoft Corp*, 253 F3d 34 (DC Cir 2001).

⁵⁰ *Massachusetts v Microsoft Corp*, 373 F3d 1199 (DC Cir 2004).

sult on March 24, 2004. It found that Microsoft had abused its dominant position in the market for operating systems to the detriment of the server market and the market for media players.⁵¹

The question of who should define the product is perhaps the central question regarding scope-of-permission goods. The tying claim in the U.S. case turned on how Microsoft had organized the relationship—both technical and financial—between Windows and Internet Explorer. In the EU case, the focus was on the same questions regarding Windows and Windows Media player. In other work, I have argued that the ideas of tying and bundling are too crude to help us understand these situations. The core characteristics of scope-of-permission goods—private public goods with zero-marginal cost increments to the good—make tying and bundling particularly elusive.⁵²

Instead, I have suggested that we should focus on *presence*, *visibility* and *price*.⁵³ Presence is about where software is located: does it come on the Windows CD, or is the software preinstalled by an OEM or is it somewhere else? Put differently, how is the software distributed? Prior to the Internet, Microsoft enjoyed a substantial distributional advantage in being able to incorporate new software into Windows. The existence of the Internet, where software can be downloaded easily, should diminish that advantage, but, as discussed below, the evidence in the EU case suggests that Microsoft still enjoys a powerful distributional advantage over its software competitors. Microsoft can easily make software present by just folding new software into Windows.

Visibility is distinct from presence. Software can be present but be invisible. In truth, most software on your computer fits this category. Microsoft Word comes with a zillion features but the average user only ever sees a handful. Indeed, the current interface of Word recognizes this and “evolves” to track your use patterns by only showing on menus features that you use frequently. Software can also be visible but not present. Some features in software are listed as being available for use, but in truth they need to be installed on first-use, either from a CD or over the network.

⁵¹ *EU Commission Decision* (cited in note 3).

⁵² Picker, 158 J Inst Theor Econ at 158 (cited in note 3).

⁵³ *Id.*

Finally, price focuses on the question of whether a separate charge is required to use software. Windows is designed as a trademarked product sold for one price. Sort of actually. Microsoft does sell what it calls a “personalization pack” and an “enhancement pack” for Windows XP. Microsoft Plus! and Microsoft Plus! Digital Media Edition add additional functionality and options to Windows XP.⁵⁴ Buy a computer online at Dell’s website and you will be given the option—for a fee—to add these operating system enhancements to your purchase. And Microsoft is issuing a reduced-feature “starter edition” of Windows XP for Thailand and other developing markets.⁵⁵ So even for Windows reality is slippery, but big picture, you pay one price for Windows and you get Windows, whatever Microsoft has deemed that to be. You can’t buy Windows a la carte and pay a reduced price if you never want to print anything.

The distinction between visibility and presence as to Windows Media Player is one of the key lines of separation between the U.S. and EU cases. In the EU case, Microsoft argued that the U.S. case remedy sufficed as to media players.⁵⁶ Under the U.S. remedy, OEMs could sell computers without visible access to WMP and could make other media players the default installation. Critically—at least from the EU’s perspective—this meant that the underlying code for the WMP would continue to be *present* on the machines shipped by OEMs.⁵⁷

In part, the EU understood the U.S. remedy to be framed by the way in which liability was found in the U.S. case. The D.C. Circuit had overturned the original finding of liability for tying Internet Explorer to Windows. The district court had proceeded on an analysis of *per se* liability, but the D.C. Circuit believed instead that the tying claim needed to be evaluated under a rule of reason analysis. The U.S. government dropped the tying claim, given the uncertainty of the likely outcome and the fact that further liability litigation would have delayed imposition of a remedy.

⁵⁴ <http://www.microsoft.com/windows/plus/plushome.asp>.

⁵⁵ Michael Kanellos, *Five countries to get cheap Windows XP*, CNet News.com (Aug 10, 2004) (available at http://news.com.com/2100-1016_3-5304023.html).

⁵⁶ *EU Commission Decision* ¶ 796 (cited in note 3).

⁵⁷ *Id.* at ¶ 798, ¶ 828 (“It is important to note that the US Settlement addressing monopoly maintenance does not alter this assessment. Removal of end-user access does not restore the choice of Microsoft’s customers as to whether to acquire Windows without WMP.”).

The U.S. remedy therefore was imposed for the found illegal monopoly maintenance, and not for the allegedly illegal tying of the browser to Windows. I have argued elsewhere that I believe that Microsoft should not have been found to have engaged in illegal tying of the browser to Windows,⁵⁸ but more to the point here is the way in which the liability framing affected remedies. On the remedy remand, the district court noted that actual removal of code—as contrasted with removal of visible means of access to that code—“would likely be reflected in the imposition of liability for illegal tying, rather than liability for illegal monopoly maintenance.”⁵⁹

The U.S. approach limits the extent to which courts intrude into product design. Microsoft is free to commingle software code at will and to re-use chunks of code to provide different functionalities. At the same time, the remedy controls the visibility of pieces of the code. This is one approach to the scope-of-permission framework: the user has the right to use the code that is present but the transaction costs of using it are higher because the code isn’t visible to the end user. By making it possible for computer sellers to reduce the visibility of software functions, such as Internet Explorer, we enhance the ability of browser competitors to place their software on the desktop.

In the EU case, the Commission focused on the question of whether Microsoft had impermissibly tied WMP to Windows in violation of Article 82 of the European Union Treaty. The EU tying standard under Article 82 focuses on a series of issues familiar to students of U.S. antitrust tying law, namely where the two goods are separate products; whether the firm has a dominant position in the tying product market; whether the firm does not allow customers to obtain the tying product without the tied product; and whether the tying forecloses competition.⁶⁰

That means we start with the question of whether Windows and WMP are two separate products. Microsoft argued that it was “inappropriate to consider multimedia playback functionality to be a separate product from an operating system.”⁶¹ Microsoft contended that all PCs would be shipped with multimedia playback included. But the EU

⁵⁸ Picker, 158 J Inst Theor Econ at 133 (cited in note 3).

⁵⁹ *New York v Microsoft*, 231 FSupp2d 203, 237 n. 24 (DCC 2002), aff’d, 373 F3d 1199 (DC Cir 2004).

⁶⁰ *EU Commission Decision* ¶ 794 (cited in note 3).

⁶¹ *Id* at ¶ 404.

properly rejected this analysis. As in *Jefferson Parish*, the leading U.S. case on the separate product doctrine,⁶² the fact that consumers would inevitably use the functionalities together isn't the point. In *Jefferson Parish*, few patients were getting surgery without anesthesia, indeed, presumably none were. And as the EU itself suggested, most computer users also use word processing programs, but no one had suggested that word processing was part of the market for operating systems.⁶³

As the EU recognized, the point is who chooses which anesthesiologist goes with the operating room, or which media player goes with the Windows operating system.⁶⁴ Do consumers self-bundle, do OEMs competing in putting together bundles or does Microsoft guarantee that WMP comes with Windows and can Microsoft take steps to discourage the inclusion of a second media player?

These are the right questions; the answers are the hard part. But switch perspectives: What is Microsoft seeking to accomplish in distributing WMP as part of or with Windows? And should we be concerned about it? We typically tell one of two tying stories.⁶⁵ The first is tying as an effort to increase profits in a very basic way. The monopolist effectively charges more to customers through the tie. The standard analysis on tying of this sort emphasizes the "one-monopoly profit" notion, applicable in fixed proportion situations, where a monopolist cannot increase profits through tying, and the possibility of price discrimination in variable proportions cases, where a monopolist may be able to increase profits through tying. We can say little generally about price discrimination of this sort, as the discrimination can either reduce or enhance overall social welfare.

The second tying story is that the monopolist ties the second good in an effort to protect its original monopoly. That may have been the right story in the browser antitrust case,⁶⁶ though there may have been other sufficient reasons for the tie.⁶⁷ But the nefarious

⁶² *Jefferson Parish Hospital District No. 2 v Hyde*, 466 US 2 (1984).

⁶³ *EU Commission Decision* ¶ 405 (cited in note 3).

⁶⁴ *Id.* at ¶ 809 ("Microsoft's argument ... disregards the alternatives that would be available to customers if Microsoft did not bundle WMP and is for this reason invalid. ... OEMs are likely to follow consumer demand for a preinstalled media player and offer a package which would include a media player on top of Windows, the difference being that it would not automatically be—although it could be—WMP.").

⁶⁵ Indeed, both of these stories surfaced in the EU case as part of the server-Windows part of the case. *EU Commission Decision* ¶¶ 764-68 (cited in note 3).

⁶⁶ Dennis W. Carlton and Michael Waldman, *The strategic use of tying to preserve and create market power in evolu-*

story is that Microsoft understood Netscape Navigator to pose a threat to its Windows monopoly, and in particular, to the fact that software developers wrote to the Windows application programming interface (API). Microsoft understood that it could defeat Netscape's threat to that control if it merely fragmented the browser market, and tying Internet Explorer would go a long way towards fragmenting the browser market.⁶⁸

Do we think that either of our standard tying theories applies here? The EU concluded, if only weakly, that the media player might be a beachhead in a larger attack on Windows. Media players do expose their own APIs and applications can be written to them, as AOL has done with RealNetworks's media player.⁶⁹ Still, even if the media player is combined with other software, such as Java, we are a long way from the broad-based platforms established by Windows, the Mac OS or Linux.

So return to the first tying story, namely, the idea that Microsoft might be tying WMP to Windows to get customers to pay, on average, more money. As I suggested above,⁷⁰ the literature on bundling and product scope does suggest good reason for a monopolist to expand the scope of the product and the addition of WMP to Windows would be consistent with that.

But I think that there is a more direct story here, perhaps a useful third story for tying, and one understood by the Commission.⁷¹ The media player is the key point—perhaps even the bottleneck—in this two-sided market.⁷² The media player sits in the middle between consumer listeners and content creators. There are a number of ways to extract value in these markets and none of the payments need come from the consumers themselves. So broadcast TV is “free,” because we pay by watching commercials. Adobe Acrobat Reader is free to readers, because a broadly-installed reader platform makes it pos-

ing industries, 33 *Rand J Econ* 194 (2002).

⁶⁷ As I have argued elsewhere. See Picker, 158 *J Inst Theor Econ* at 133 (cited in note 3).

⁶⁸ *Id.* at 130.

⁶⁹ *EU Commission Decision* ¶¶ 892, 966, 972 (cited in note 3).

⁷⁰ See note 12 and accompanying text.

⁷¹ *EU Commission Decision* ¶ 975 (cited in note 3).

⁷² As the EU recognized. See *id.* at ¶ 904. There is a rapidly growing literature on two-sided markets. For an introduction, see Jean-Charles Rochet and Jean Tirole, *Two-Sided Markets: An Overview* (working paper 2004) (available at http://faculty-gsb.stanford.edu/wilson/E608_2004/pdf%20files/Game%20Theory-Models%20and%20Applications/Rochet.Tirole.Two-Sided%20Markets.pdf).

sible to sell expensive authoring software to writers. Microsoft bundles WMP with Windows not to extract more dollars from end-users, but to get those dollars from third parties. Distributing “free” platforms is hard, but Microsoft does so just by bundling the platform with Windows.

Indeed, the Commission concluded that Microsoft enjoyed a “ubiquity” or reach advantage compared to other makers of media players, and that that advantage might decisively tip the media player market in Microsoft’s favor.⁷³ Media player software is platform software and the value of the platform depends on how much content is developed for it. But content developers face a choice as well: how many platforms to support and which ones? If supporting multiple platforms is costly—and the evidence in the EU case suggested that it was⁷⁴—a content provider might choose to support only one or two platforms and would naturally focus on the platform with the largest reach. Microsoft’s tie of WMP to Windows almost certainly ensures that the media player with the largest reach is WMP.

How should the Commission remedy this problem? The Commission sought to create competition at the computer seller level by requiring Microsoft to create two different versions of Windows, one with WMP and one without. As I previously advocated exactly this remedy—mandatory versioning is what I called it—I am hard pressed to say that the Commission is completely out to lunch (or perhaps we are having lunch together).⁷⁵ Under the remedy, Microsoft would not be required to charge different prices for the with and without versions, and Microsoft would be allowed to negotiate with OEMs to have the “with” version installed on desktops.⁷⁶ That is the point: Microsoft would have to bargain to get WMP on the desktop, just as Real, Apple and all of the other media player companies currently bargain to get their software distributed.

Take stock of that point. Windows isn’t just software: it is one of the best possible vehicles for distributing software (Microsoft Office is another). Prior to the recent anti-trust actions, when Microsoft added software to Windows it could be assured that that

⁷³ *EU Commission Decision* ¶ 842 (cited in note 3).

⁷⁴ *Id.* at ¶¶ 883-84.

⁷⁵ Picker, 158 *J Inst Theor Econ* at 152 (cited in note 3).

⁷⁶ *EU Commission Decision* ¶ 959 (cited in note 3).

software would become widely distributed as the next version of Windows rolled out. Microsoft enjoyed a huge competitive advantage in being able to fold WMP into Windows. One measure of this is the distributional deal cut by RealNetworks with Compaq. The EU Commission characterized that deal as “a revenue model of not insignificant relevance.”⁷⁷

But it is important to understand the nature of Microsoft’s competitive advantage. The EU Commission characterized RealNetworks’s revenue sharing as an example of “the significant additional cost that tying imposes on Microsoft’s rivals.”⁷⁸ That isn’t right, or, more precisely, we aren’t really told enough to know how right it is. Consider an OEM’s decision to distribute a second media player. With WMP already on the system, an OEM will focus on the *incremental* costs and benefits of adding a second media player. Incremental benefits could arise if the second media player has more features than WMP or taps into music not released in a format supported by WMP. The incremental costs of the second media player are typically extra support and training costs.⁷⁹ These were the costs that Microsoft used as a barrier to entry against Netscape Navigator.⁸⁰ Without WMP installed, adding RealPlayer would almost certainly be a net positive; with WMP installed, adding RealPlayer may very well be a net negative for the OEM.

Indeed, the story gets worse. If consumers won’t pay more for a computer with a second installed player, the second player is just a negative for the OEM and the a second media player firm needs to pay the OEM at least the incremental support costs associated with adding its product. But it strikes me as unlikely that the payments RealNetworks is making to Compaq merely reflect additional support costs. To be sure, there is not enough information in the public record to know, but the power to distribute is valuable, and firms routinely get paid for distribution. The deal between Real and Compaq looks much like a standard carriage deal.

With Windows, Microsoft has its own distribution channel and Microsoft doesn’t have to strike separate distribution deals. WMPs presence does make it somewhat more

⁷⁷ Id at ¶ 856.

⁷⁸ Id at ¶ 856.

⁷⁹ Id at ¶ 852.

⁸⁰ *Microsoft*, 253 F3d at 60-62 (cited in note 49).

expensive for a media player competitor to enter, but it would be a mistake to measure that entry barrier by the size of the observed payments by media player firms to OEMs. Pure distribution payments probably represent the lion's share of those payments.

But that takes us to the central problem with the Commission's versioning remedy. The distribution payments suggest that media player software is *under-distributed*. In a competitive market, the price of distribution should reflect the marginal cost of distribution. If hard-disk space is free—and effectively we should think of it that way—the key cost of distribution is the extra support calls that come with having more than one media player installed. If I am right that that Real's payments to Compaq exceed those costs—and I have no way to assess that but the Commission should have—then we are seeing market power exercised in distributing “free” software such as media players, and that software is under-distributed.

There was a second route available to the Commission, and indeed, one that the EU had under active consideration as an alternative to mandatory versioning.⁸¹ This is a “must-carry” remedy, meaning that Microsoft would have to distribute one or more media players with Windows if Microsoft wanted to bundle WMP with Windows. The must-carry remedy would directly mitigate the ubiquity advantage that the Commission thought would tip the media platform format war. It would also mitigate the market power that may be being exercised by OEMs in the deals that they strike to distribute software.

As I noted before, I previously advocated a mandatory versioning remedy of the sort implemented by the EU. Why now the preference for must-carry? Two points. First, my views were premised on the idea that with increasing broadband penetration, the advantage of centralized distribution in Windows or through OEMs was declining relative to over-the-network distribution. I think that is right—indeed, I am not sure the point can really be challenged—but the behavior of all participants in the industry and the evidence presented in the EU case suggests that there still is a real advantage to centralized distri-

⁸¹ *Commission gives Microsoft last opportunity to comment before concluding its antitrust probe*, European Commission Press Release (Aug 6, 2003) (available at <http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/03/1150&format=HTML&aged=0&language=EN&guiLanguage=en>).

bution. Second, the point of mandatory versioning was to allow competition at the OEM level. But we should be concerned if we are seeing market power exercised at the level, and, again, the evidence in the EU case on the distribution deals signed with OEMs suggests that there is a good chance that we are seeing market power there.

The core disadvantage of must-carry is the concern about market-engineering, one reason must-carry was rejected in the U.S. case.⁸² How much market engineering is a question of design. We shouldn't just choose firms and given them must-carry rights in perpetuity. Better to choose a number of media-player slots in Windows—five?—and auction off the rights to those slots (and we could require Microsoft to buy in that auction as well if it wants WMP to continue to come with Windows). Who gets the money? We would almost certainly end up compensating OEMs for the extra support costs. After that, dollar (or Euro) issues are fighting points, but little turns on that regarding implementing meaningful competition in media players.

There is also a real irony here in the Commission's choice of mandatory versioning over must-carry. In the U.S. under the Telecommunications Act of 1996, we have sought to create facilities-based competition, that is, competition between telcos each of which has its own equipment and lines. That is proven to be hard to do, and most of the facilities-based competition that has emerged is *intermodal* competition, that is, competition between the local telephone incumbent and cable companies and new wireless systems.⁸³

The must-carry remedy is facilities-based competition on the cheap. Not quite free, because there will be extra support costs in having multiple players installed on a computer, but, by the standards of telecommunications, really cheap facilities-based competition. By bundling other media players with Windows, WMP's competitors would have the same "reach" as WMP, plus we would avoid the problem of missing APIs. That is, if we really want to encourage developers to write to the media player, the media player needs to be available. The mandatory versioning approach fragments the media player base, making it harder for any developer to rely on a particular API. That was the Commission's point, as it preserves competitive balance among media players, but must-carry

⁸² *Massachusetts*, 373 F3d at 1239 (cited in note 50).

⁸³ See note 1 and accompanying text.

would have done that while avoiding the fragmentation problem. And, if the Commission really thinks that it is possible that media players might grow incrementally towards being an operating system,⁸⁴ must-carry would jump-start that process.

IV. Conclusion

Scope-of-permission goods are goods of arbitrary scope, where consumption of the good is nonrivalrous, where users can be excluded from consuming the good—through market organization, technology or law—and where increments to the good can be added to the good, once they are created, at zero marginal cost. These goods have been at the heart of some of our most difficult cases in antitrust law and competition policy. This includes the extended antitrust litigation over the blanket licenses for the use of copyrighted works issued by ASCAP and BMI. It also includes the Windows operating system, especially as it has grown over time with the addition of Internet Explorer and the Windows Media Player.

In the ASCAP cases and in the U.S. and EU antitrust actions against Microsoft, the core question is to what extent do we want to re-scope a scope-of-permission good so as to foster entry. In the recent revision of the 40-year old consent decrees in ASCAP, we have once again pushed ASCAP to offer meaningfully smaller licenses—a required subtraction of scope—with the hope that we would create entry in collective rights organizations.

The U.S. and EU have taken different paths in their actions against Microsoft. Both focus on the scope of the rights given to end-users in Windows. The U.S. has chosen to limit the visibility of the Windows Media Player by allowing computer sellers to hide visible means of access to WMP. WMP remains present to rise up if invoked by a savvy consumer or by a third-party. In contrast, the European Commission has required Microsoft to engage in mandatory versioning, requiring Microsoft to offer computer sellers versions of Windows with and without WMP.

The U.S. remedy intrudes less directly into product design, the EU remedy does a better job of preserving competition in media players by limiting the reach advantage that

⁸⁴ See note 69 and accompanying text.

Microsoft has by being able to tie and distribute WMP with Windows. But we had a better alternative available, one that was rejected by both the U.S. and the EU. Imposing a must-carry obligation—requiring Microsoft to distribute other media players if it chose to distribute WMP with Windows—would have neutralized Microsoft’s ability to tie WMP to Windows, while avoiding concerns about fragmenting the programming infrastructure available to third parties. This would have created the possibility of strong competition, akin to the facilities-based competition we have sought to create in U.S. telecommunications.

At least for software, we should think that there are strong asymmetries between subtraction and addition remedies. Subtracting disrupts the natural flow of product development and leaves the software producer with the difficult task of unscrambling the software code. It also creates the risk of fragmenting the programming base available to third parties. Subtraction may be sensible when the underlying goods are more distinct—when we can separate Bach from the Beatles—but in the Microsoft cases, instead of subtracting scope, as we did in ASCAP and the U.S. and EU have done in Microsoft, we should have expanded the scope of Windows by imposing a must-carry remedy.

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