

THE INTERRELATION BETWEEN INTELLECTUAL PROPERTY LICENSES
AND THE DOCTRINE OF *NUMERUS CLAUSUS*.
A COMPARATIVE LEGAL AND ECONOMIC ANALYSIS

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In the western legal tradition, the principle of numerus clausus is regarded as a fundamental hinge of the classic Law of Property: while contract law allows individuals to freely shape legally enforceable promises according to their needs, property law is confined in a closed set of forms, and no “property” rights may be created other than those explicitly provided by the Legislator. Conversely, when looking at intellectual property the pattern we observe seems at first to be different: the holder of a primary bundle of rights (Copyright, Patent, Trademark, etc.) is generally considered free to tailor and transfer to third parties any combination of his economic faculties, licensing secondary rights that stand erga omnes and circulate autonomously in market transactions. The aim of this paper is to cast some light on this apparently ambivalent role of the numerus clausus principle. The efficiency rationales of the doctrine are discussed, and then specifically applied to the field of intellectual property in a comparative perspective, in order to possibly identify common operational rules demonstrating the constant feature of numerus clausus as a regulatory principle meant to minimize the informational problems that an uncontrolled fragmentation of property rights over an asset might produce.

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I. INTRODUCTION

The aim of this work is to cast some light on the apparently ambivalent role assigned in the legal systems of the western legal tradition to the principle of *numerus clausus* of property rights, examining it through the lens of contractual licensing practices on intellectual property.

As will be further discussed, *numerus clausus* can be regarded as one of the fundamental hinges of the “classic” Law of Property, limiting contractual autonomy in the definition of the relevant and admissible classes of property schemes. In a nutshell, while contract law allows individuals to freely shape legally enforceable promises according to their needs, property law is confined in a closed set of defined forms, providing property-type protection only for those interests explicitly recognized and disciplined by the Legislator.

The application of this principle appears easily detectable in the field of tangible resources, where the notion of ownership, though with different dogmatic implications throughout civil and common law systems, depicts the fundamental primary right over things¹, functionally connected to the exclusive control over the economic faculties that pertain to their use, and that, in turn, can be fragmented by the owner only according to a mandatory list of lesser (“limited”) real rights provided by the Law.

Conversely, when looking at intellectual property the pattern we observe seems to be a different one. On one hand, at a primary level, the application of the

¹ In the European literature, see, in France, Dabin, J. *Le droit subjectif*. Paris: Dalloz, 1952, 178 ff.; Terré, F. & Simler, P. *Droit civil. Les biens*. 5th ed. Paris: Dalloz, 1998, 13; Atias, C. *Droit Civil. Les Biens*. 10th ed. Paris: LexisNexis Litec, 2009, 57; in Germany, Baur, F. Baur, J.F. & Stürner, R. *Sachenrecht*. 18th ed. München: Beck, 2009, § 24/5, 307; in Italy, among others, Costantino, M. *Contributo alla teoria della proprietà*. Napoli: Jovene, 1967, 30; Gambaro, A. *Il diritto di proprietà*. Milano: Giuffrè, 1995, 221. Even in common law, although the concept of ownership is not theoretically developed and technically applied to property law (see below Section II), legal scholars point out that “the word ‘ownership’ is used to describe the *content* of one particular property right”: see Swadling, W.J. “Property: General Principle.” *English Private Law*. Ed. Birks, P. vol. I. Oxford: Oxford University Press, 2000, 218, meaning that “[o]f the various property rights which can exist in relation to things, the word ‘ownership’ is used to describe the right which gives its holder the highest degree of access and control”, thus evidently reinterpreting the concept of “full owner” as “the person who has the greatest interest in a thing admitted by a mature legal system”: Honoré, T. “Ownership.” *Oxford Essays in Jurisprudence*. Ed. Guest, A.G. Oxford: Oxford University Press, 1961, 104.

principle of *numerus clausus* shows an evident “constitutional” dimension², assuring Legislators a monopolistic power over the process of creation and allocation of new classes of exclusive rights for the economic exploitation of knowledge-based resources and simultaneously limiting the role of contracts in the definition of the movable “boundaries of private property”³. On the other hand, however, once endowed with an already recognized primary intellectual property right (*e.g.* Copyright, Patent, Trademark, etc.), its owner is generally considered free to tailor and to subsequently allocate to third parties *any* combination of his economic faculties, licensing types of secondary rights that stand *erga omnes* and circulate autonomously in market transactions without apparently being subject to any specific restriction⁴.

In this regard, a strict analysis of intellectual property contractual practises as they are effectively regulated by the Legislators and enforced by the Courts appears extremely useful, not only to better understand the different applications of *numerus clausus* in the classic “real property regime” (referred to tangible objects), but also, and mainly, to test its possible efficiency-rationales, and select the general interests that can be successfully protected through a unifying interpretation of the principle, coherent with its policy implications.

The article proceeds as follows: Section II briefly examines the *numerus clausus* doctrine, its historical origins and dogmatic foundation in the field of corporeal resources; Section III surveys the economics of *numerus clausus*, focusing on the works of those authors who have explained its logic on efficiency grounds; Section IV explores in general terms its relevance in the intellectual property context; Section V focuses on a specific branch of intellectual property, comparing the way in which licensing agreements on copyright are positively regulated and enforced in different

² In the specific sense described by van Erp, S. “A *Numerus Quasi-Clausus* of Property Rights as a Constitutive Element of a Future European Property Law.” *Electronic Journ. Comp. Law* 7/2 (2003), 11; Akkermans, B. *The Principle of Numerus Clausus in European Property Law*. Antwerp-Oxford-Portland: Intersentia, 2008, 407; and in this regard see also the analysis pursued by Dorfman, A. “Property and Collective Undertaking: The Principle of *Numerus Clausus*.” *U. Toronto Law Journ.* 61 (2011): 467, 501 ff.

³ Heller, M.A. “The Boundaries of Private Property.” *Yale Law Journ.* 108 (1999): 1163; for an analysis of this aspect of the principle in the field of intellectual property see below, Section IV.A.

⁴ In critic terms, Van Houweling, M.S. “Author Autonomy and Atomism in Copyright Law.” *Va. L. Rev.* 96 (2010): 549; but for a recent theoretical support of this different attitude of the principle, see “A Justification for Allowing Fragmentation in Copyright.” Note. *Harr. L. Rev.* 124 (2011): 1751.

legal systems (the U.S. Federal Copyright Law and the German *Urheberrechtsgesetz*) in order to identify common operational rules⁵ connected to the principle; Section VI concludes, concentrating on the constant features of the *numerus clausus* as a regulatory principle aiming to minimize the coordination problems that an uncontrolled fragmentation of property rights over an asset might produce.

II. THE DOCTRINE OF *NUMERUS CLAUSUS*

According to the *numerus clausus* doctrine, the number of “property” rights is limited (closed), their content is restricted and it is laid down in mandatory rules how these rights can be shaped, transferred and extinguished: as a consequence, while contractual agreements can tailor juridical relations standing *vis-à-vis* the bound parties, no “property” rights may be autonomously created other than those explicitly provided by the Law⁶. This means, as a direct corollary, that only acknowledged property rights can be chosen and applied by individuals (in the German literature, the s.c. *Typenzwang* principle), but it also implies that the content of each property right cannot be autonomously altered outside its fundamental legal boundaries (the s.c. *Typenfixierung* principle)⁷.

A. *Terminological premises*

It has already emerged from this essential definition that beneath the principle lies the dichotomy between a relative, “personal right” (or right *in personam*),

⁵ Throughout the article, I adopt the comparative methodological distinction between “declamatory rules” (*i.e.* rules formally enunciated by statutes or by the doctrine and not enforced in practice) and “operational rules” (*i.e.* rules that effectively operate in the legal system): see Sacco, R. “Legal Formants: A Dynamic Approach to Comparative Law.” *Am. Journ. Comp. Law* 39 (1991): 1.

⁶ For preliminary references, among others, Mattei, U. *Basic Principles of Property Law*. Westport: Greenwood Press, 2000, 14; van Erp, S. “A *Numerus Quasi-Clausus* of Property Rights as a Constitutive Element of a Future European Property Law.” *supra* note 2; von Bar, C. & Drobnig, U., *The Interaction of Contract Law and Tort and Property Law in Europe. A Comparative Study*. Munich: Sellier, 2004, 320 ff.

⁷ See Baur, F. Baur, J.F. & Stürner, R. *Sachenrecht*. *supra* note 1, § 1/7, 3 f.; and for comparative essential references, Bartels, S. & Milo, M. “Contents of Real Right: Personal or Proprietary. A Principled History.” *Contents of Real Rights*. Eds. Idd. Nijmegen: Wolf Legal, 2004, 5, 13; Struycken, T.H.D. “The *Numerus Clausus* and Party Autonomy in the Law of Property.” *Party Autonomy in International Property Law*. Eds. Westrik, R. & van der Weide, J. Munich: Sellier, 2011, 59.

and an absolute, “real right” (or right *in rem*). To better explain the terminology adopted in the following discussion, it is worth underlining that this conceptual distinction, and the connected categorization of rights, operates differently in the civil law and common law traditions.

In modern continental Europe the basic concepts of the Law of Property find their cultural origins in Roman Law, adopted, at least implicitly, as an authoritative reference after the abolition of the feudal system of stratified property relations (fragmented into the *duplex ordo* of *dominium eminens* and *dominium utile*)⁸. In this regard, the concept of “real rights” – as rights pertaining to a “thing” (*res*) that represents the object of their enjoinder (*ius in rem*) and legal protection (*actio in rem*) – may be considered at the core of property discipline in the civil codes of the 19th century, where the categories of *droits réels*, *diritti reali*, *dingliche Rechte*, etc. progressively emerged as paradigms of “absolute rights”: valid *erga omnes*, availing against an indefinite class of people who must respect them and – in this regard – opposed to mere “relative rights”, which tie the holder only to specific individuals who are under corresponding obligations, whose fulfilment is essential to satisfy his credit interests⁹.

On the other hand, the evolution of common law has not been characterized by the same radical revision of the feudal organization of entitlements over economic resources, so that the basic structures of modern property law still reflect, even in terminological aspects (*e.g.* the notions of “tenure” or “estate”), the medieval schemes of relation between landlords and vassals concerning power over land¹⁰, although obviously revisited according to what has been referred to as a “system of *contemporary* feudal law”¹¹. In this context there is no room for a formal legislative distinction

⁸ See Birks, P. “The Roman Law concept of *Dominium* and the idea of Absolute Ownership.” *Acta Juridica* (1985): 1, and in critical terms, Gambaro, A. “Proprietà in diritto comparato.” *Digesto discipline privatistiche. Sez. civ.* vol. XV. Torino: Utet, 1997, 502, 515.

⁹ In the evolutionary context of European Private Law, see Cashin Ritaine, E. “Common Frame of Reference and Property Law: A General Introduction.” *The Future of European Property Law*. Eds. van Erp, S. Salomons, A. & Akkermans, B. Munich: Sellier, 2012, 11 ff.

¹⁰ See Burn, E.H. & Cartwright, J. *Cheshire and Burn’s Modern Law of Real Property*. 17th ed. Oxford: Oxford University Press, 2006, 27.

¹¹ van Erp, S. “Comparative Property Law.” *The Oxford Handbook of Comparative Law*. Eds. Reimann, M. & Zimmermann, R. Oxford: Oxford University Press, 2006, 1043, 1058, and see also, Moccia, L.

between real and personal rights comparable to the one operating in civil law¹², and the very concepts of “ownership” and (or as) “absolute right”¹³ do not share the same relevance assumed in continental systems of law¹⁴, as significantly testified by the persisting doctrinal and jurisprudential attitude of treating property as a mere collection of faculties (“a bundle of sticks”) regulating personal relations among individuals¹⁵.

Nonetheless, the *summa divisio* of relative (personal) and absolute (real) rights is not systematically irrelevant in common law, as is significantly shown by those authoritative authors who have focused comparatively on the fundamental, distinguishing feature of that particular class of entitlements that can be hereafter examined as “property rights” (or “property interests”), meaning that they show their effects *vis-à-vis* third parties, being “good against people with whom we have no contract, in short, strangers”¹⁶. In this sense, we can also say that in common law “before a right can be admitted to the category of property rights it must both be

“Il modello inglese di «proprietà».” Alpa, G. et al., *Diritto privato comparato. Istituti e problemi*. Roma-Bari: Laterza, 2004, 35.

¹² Birks, P. “Before We Begin: Five Keys to Land Law.” *Land Law. Themes and Perspectives*. Eds. Bright, S. & Dewar, J. Oxford: Oxford University Press, 1998, 470; Pretto-Sakmann, A. *Boundaries of Personal Property. Shares and Sub-Shares*. Oxford: Hart, 2005, 17-23.

¹³ On this specific aspect, see Samuel, G. “‘Le Droit Subjectif’ and English Law.” *Cambridge Law Journ.* 46 (1987): 264.

¹⁴ In this regard, it is sufficient to think of the fact that common law does not focus on the idea of the “owner” as the holder of an “absolute right”, but rather protects rights related to things through the doctrine of estates (in the field of Real Property), and through a relative system of grades of “titles” that in each proceeding assesses the party with the better right to possess chattels (in the field of Personal Property): see among others Lawson, F.H. & Rudden, B. *The Law of Property*. 2nd ed. Oxford: Clarendon Press, 1982, 40 ff.; Bridge, M. *Personal Property Law*. 3rd ed. Oxford: Oxford University Press, 2002, 28 ff.; and significantly, Ackerman, B.A. *Private Property and the Constitution*. New Haven: Yale University Press, 1977, 26: “One of the main points of the first-year Property course is to disabuse entering law students of their primitive-law notions regarding ownership”.

¹⁵ For a recent survey of doctrinal and case-law applications of the “bundle of rights” theory, see Johnson, D.R. “Reflections on the Bundle of Rights.” *Vermont Law Rev.* 32 (2007): 247. For a deeper analysis of this approach and of its critical implications in understanding property dynamics, see below Section III.A.

¹⁶ In this sense, on English common law, see Rudden, B. “Economic Theory v. Property Law: The Numerus Clausus Problem.” *Oxford Essays in Jurisprudence. Third Series*. Eds. Eekelaar, J. & Bell, J. Oxford: Clarendon Press, 1987, 239, and also Harris, J.W. *Property and Justice*. Oxford: Clarendon Press, 1996, 47 ff., and Id., “Property – Rights *in Rem* or Wealth?.” *Themes in Comparative Law. In Honour of Bernard Rudden*. Eds. Birks, P. & Pretto, A. Oxford: Oxford University Press, 2002, 51, 58, applying to the purposes of comparative property law the idea that “for an item to be comprehended within a property institution – that is, a specific point of reference for the rules which constitute such an institution – it must either be the subject of direct trespassory protection or else be separately assignable as part of private wealth”.

capable of assignment to third parties and of binding third parties without their consent¹⁷.

These intuitions furnish a useful methodological tool in order to coordinate civil and common law traditions in the analysis of the relation between the areas of contract and of property relations¹⁸: the former are disciplined by the *privity* principle, bind only those persons who have entered a specific legal relation, and are generally shielded against any external interference by a simple tort law-liability rule; the latter refer to individual faculties over an asset and in this respect show absolute effects, *i.e.* are good against the rest of the world, being relevant and “exigible”¹⁹ by the holder in respect of an indefinite list of people, comprehending subsequent purchasers, possessors or potential tortfeasors²⁰.

¹⁷ Swadling, W.J. “Property: General Principle.” *supra* note 1, § 4.05.

¹⁸ From a civilian perspective, it may be argued that such a notion of “property rights” blurs the traditional and consolidated dogmatic distinction between real and personal rights: as an example, according to this view, we should consider the lessee as the holder of a property right, given the fact that all continental systems recognize the principle that “sale does not break the lease” (*emptio non tollit locatum*), so that the lessee’s right runs with the asset, standing against any subsequent owner. In this regard it is worth noticing that: (1) in general terms, the notion of “property rights” here adopted is assumed as a methodological tool, and it does not necessarily imply any revision of consolidated dogmatic concepts; (2) at the same time, the case of lease seems to represent the perfect example of the crisis of the conceptual distinction between personal and real right that, as it is always more evident in practice, should no longer be regarded as a monolithic axiom that can coherently embrace every single juridical position defined in the legal system (see van Erp, S. “Comparative Property Law.” *supra* note 11, at 1052). In the continental literature, for the emergence of critical positions and dogmatic debate, see, with different approaches and theories, Ginossar, S. *Droit réel, propriété et créance: élaboration d’un système rationnel des droits patrimoniaux*. Paris: Pichon & Durand-Auzias, 1960; Id., “Rights in Rem – A New Approach.” *Israel Law Rev.* 14 (1979): 287; Giorgianni, M. “Diritti reali (diritto civile).” *Novissimo Digesto Italiano*. vol. V. Torino: Utet, 1960, 748; Luminoso, A. *La tutela aquiliana dei diritti personali di godimento*. Milano: Giuffrè, 1972; Comporti, M. *Contributo allo studio del diritto reale*. Milano: Giuffrè, 1977, 327 ff.; Canaris, C.W., “Die Verdinglichung obligatorischer Rechte.” *Festschrift für Werner Flume zum 70. Geburtstag 12. September*. Ed. Jakobs, H.H. Köln: O. Schmidt, 1978, 371; and recently Westermann, H.P. “Sachenrecht - statisch oder dynamisch?.” *Festschrift für Jan Schapp zum siebzigsten Geburtstag*. Eds. Gödicke, P. et al. Tübingen: Mohr Siebeck, 2010, 507. In this regard it is also interesting to notice that also in the American literature, leasehold is considered a property relation with “hybrid”, “contractual” features: see for a survey, Miceli, T.J. Sirmans, C.F. & Turnbull, G.K. “The Property-Contract Boundary: An Economic Analysis of Leases.” *Am. Law Econ. Rev.* 3 (2001): 165, 166 f.; and in England, *Megarry & Wade - The Law of Real Property*. Ed. Harpum, C. 6th ed. London: Sweet & Maxwell, 2000, 1-010.

¹⁹ In the specific sense qualified by Birks, P. “Before We Begin: Five Keys to Land Law.” *supra* note 12, at 473.

²⁰ In the comparative literature, see Pretto-Sakmann, A. *Boundaries of Personal Property. Shares and Sub-Shares*. *supra* note 12, at 91; Milo, M.J. “Property and real rights.” *Elgar Encyclopedia of Comparative Law*.

B. *The regulatory role of numerus clausus: a comparative overview*

It has been authoritatively observed that all the fundamental concepts of the modern Law of Property to which we still refer today were developed for the defence of the interests of the ruling classes at a time when the core of their capital was land²¹. The evidence of this statement is particularly clear in the continental European law tradition, where the norms of the civil codes defining the scope of the possible objects of property rights have been written and traditionally interpreted as referring to corporeal things, which are suitable for satisfying human needs through their physical use²².

In this “classical model of property law”²³, which traces its cultural origins back to the Enlightenment ideals of the French Revolution, ownership represents the most comprehensive right a man can have to a thing, expressing the natural freedom of individuals in their relations with the external world. Moving away from the feudal system of the *ancien régime*, ownership is then to be seen as “*inviolable et sacré*”, and Legislators respect its absolute nature, keeping it free from any kind of obstacle that can prevent its full enjoyment by the owner²⁴.

This pattern is particularly evident in the civil law tradition, where a unitary theory of ownership concentrates all possible rights of use of an asset in the hands of

Ed. Smits, J.M. Cheltenham: Elgar, 2006, 587; and Moreno, H.S. “Towards a European System of Property Law.” *European Rev. Priv. Law* 19 (2011): 579, 585 f.

²¹ In civil law, Belfiore, A. *Interpretazione e dottrina nella teoria dei diritti reali*. Milano: Giuffrè, 1979; for the common law perspective, Rudden, B. “Things as Thing and Things as Wealth.” *Oxford Journ. Leg. Stud.* 14 (1994): 81.

²² See C. Civ., art. 544 (Fr.); C.c. artt. 810, 832 (It.); B.G.B. §§ 90, 903 (Germ.). More in particular, it must be noted that the German tradition is certainly the one in which the notion of ownership (*Eigentum*) has been more rigorously related to the Roman model of the *ius in rem*, and thus insulated from the field of rights over intangible resources (*Immaterialgüterrechte*), so that the concept of *Geistiges Eigentum* is a relative recent (and debated) acquisition for German authors: see Seifert, F. “Geistiges Eigentum – ein unverzichtbarer Begriff.” *Festschrift für Henning Piper zum 65. Geburtstag*. Eds. Erdmann, W. Gloy, W. & Herber, R. München: Beck, 1996, 769; Jänich, V. *Geistiges Eigentum – eine Komplementärererscheinung zum Sacheigentum?*. Tübingen: Mohr Siebeck, 2002, 169 ff.; Ohly, A. “Geistiges Eigentum?” *JuristenZ* 58 (2003): 545; Pahlow, L. ““Intellectual Property”, “propriété intellectuelle” und kein “Geistiges Eigentum”?” *Historisch-kritische Anmerkungen zu einem umstrittenen Rechtsbegriff?* *UFITA* (2006): 705; Götting, H.P. “Der Begriff des Geistiges Eigentums.” *GRUR* (2006): 353.

²³ In the sense examined by van Erp, S. “From “classical” to modern European property law?.” (2006), available at www.ssrn.com.

²⁴ Gambaro, A. “Western Property Law.” *European Private Law: A Handbook*. Eds. Bussani, M. & Werro, F. vol. I. Munich: Sellier, 2009, 47.

a single individual, preventing the creation of partial rights shared among two or more persons, either through a division of possessory and non-possessory rights, or through a separation of possessory rights from rights of transfer. In other words, ownership (*propriété, proprietà, Eigentum*, etc.) is considered “the primary real right”²⁵, from (or on) which all the other secondary rights derive (or insist): conceptually, the creation of secondary rights may in fact be alternatively considered as a process of subtraction of specific economic faculties from the original right (the French theory of *démembrement de la propriété*)²⁶ or as a burden imposed over the set of rights, privileges, powers and immunities attached to being an owner (as proposed by the German and Italian doctrine)²⁷. Following the former approach, lesser rights can be regarded as qualitatively similar to the right of ownership; according to the latter, their structure is inherently different from that of the primary right²⁸: under both perspectives, however, Legislators control and limit the activity of individuals in the process of fragmentation, defining the typical and unique schemes of property interest that can be subtracted from (or imposed on) the owner’s faculties in the form of “limited real rights”, simultaneously relegating all other agreements to the field of merely obligational relations.

In the common law tradition, on the other hand, the permanent influence of the feudalist roots of the Law of Property has blurred the systematic relevance of a primary real right to things in favour of a series of legally protected interests, each related to specific faculties to the use and disposal of assets²⁹. At the same time,

²⁵ See Gretton, G.L. “Ownership and its Object.” *RabelsZ* 71 (2007): 802, 831

²⁶ Atias, C. *Droit Civil. Les Biens. supra* note 1, at 58 ff.; Larroumet, C. *Droit civil. Les Biens. Droit réel principaux*. vol. II. 5th ed. Paris: Economica, 2006, 22: “Le plus important et le plus complet des droits réels principaux dans les prérogatives qu’il confère à son titulaire est le droit de propriété. Tous les autres droits réels principaux sont conçus comme des démembrements du droit de propriété, c’est-à-dire que leurs titulaires vont disposer de certaines des prérogatives d’un propriétaire mais non de toutes”.

²⁷ Wieling, H.J. *Sachenrecht*. 5th ed. Berlin-Heidelberg: Springer, 2007, 5 ff.; Comporti, M. *Contributo allo studio del diritto reale. supra* note 18, at 212 f.; van Erp, S. “From “classical” to modern European property law?” *supra* note 23, at 11 and Id., “Comparative Property Law.” *supra* note 11, at 1056.

²⁸ For a detailed comparative analysis, focused on the “concurrency of ownership and limited property rights on that same ownership and in the same hands”, see Akkermans, B. “Concurrency of Ownership and Limited Property Rights.” *European Rev. Priv. Law* 18 (2010): 259, 265 ff.

²⁹ Significantly, Lawson, F.H. & Rudden, B. *The Law of Property. supra* note 14, at 76, introduce their treatise on “Fragmentation of Ownership” stating that “[o]ne of the greatest difficulties encountered

however, when focusing on the previously described *erga omnes* effects of property rights, *numerus clausus* – even though less easy to identify, and often in less rigid forms – emerges nonetheless as an operational principle regulating the evolution of property relations.

More specifically, in English common law the doctrine has been detected in the jurisprudence of the House of Lords³⁰ and recognized as operating by authoritative legal scholars³¹, in particular referring to the limit imposed by the Law of Property Act 1925 (Section 1) to the possible creation or conveyance of estates or charges in land³², and to the connected development of an efficient and standardized system of public registrations (now disciplined under the Land Registration Act 2002)³³.

In the U.S. system, it is a preliminary notion provided to the students of a Property course that “although owners are free to disaggregate property rights in various ways, and to impose particular restrictions on the use and ownership of land, *that freedom is not unlimited*”³⁴ since “traditionally, property law defines a limited set of

by students of property law comes from the English habit of splitting what may in a general way be called ownership into its component parts and making each of them an abstract entity which, if not quite the same as a thing, is not very different”. More in general, for the link between historic evolution and the common law tradition of property, see Holdsworth, W.S. *An Historical Introduction to the Land Law*. 1927. Clark: Lawbooks Exchange, 2004, 166 ff.; Baker, J.H. *An Introduction to English Legal History*. 4th ed. London: Butterworths, 2002, 223 ff.

³⁰ See *Hill v. Tupper* (1863), 2 H&C 121; *King v. David Allen (Billposting) Ltd.*, (1916), 2 AC 54, 60 f.

³¹ See Rudden, B. “Economic Theory v. Property Law: The Numerus Clausus Problem.” *supra* note 16, at 239 ff.; Swadling, W.J. “Property: General Principle.” *supra* note 1, at 206 ff.; Munzer, S.R. “Commons and Anticommons in the Law and Theory of Property.” *The Blackwell Guide to the Philosophy of Law And Legal Theory*. Eds. Golding, M.P. & Edmundson, W.A. Malden-Oxford: Blackwell, 2005, 148, 156; Stevens, R. “Party Autonomy and Property Rights.” *Party Autonomy in International Property Law*. *supra* note 7, at 83, 84.

³² In particular, the Law of Property Act 1925, Section 1, limits to a closed list the types of estate in land “which are capable of subsisting or of being conveyed or created at law”, and states that “all other estates, interests, and charges in or over land take effect as equitable interest”: for a comment, directly connected with the debate on the *numerus clausus*, Akkermans, B. *The Principle of Numerus Clausus in European Property Law*. *supra* note 2, at 345.

³³ Explicitly, Garro, A.M. “Recordation of Interest in Land.” *International Encyclopedia of Comparative Law*. vol. VI-8. Tübingen: Mohr Siebeck, 2004, 69: “One of the purposes of the legislation adopted for England and Wales in 1925 was to reduce the number of legal estates in land to a manageable number, so that a purchaser would have to deal with a minimal number of estates and parties in securing good legal title. A further and significant benefit from the drastic reduction in the number of legal estates was to make possible a simpler land recording system”.

³⁴ See Singer, J.W. *Introduction to Property*. 2nd ed. New York: Aspen, 2005, 7 f., (emphasis added): “The ability to burden property by restrictions must be, and is, limited by law, to ensure that property is available for transfer in the marketplace and that ownership is not tied to unwarranted restriction on

allowable packages of ownership interests called *estates*³⁵. Following this basic pattern, *numerus clausus* has recently drawn the attention of several comparative authors and legal economists, all concentrating on the central difference between contract and property law in the freedom to customize legally enforceable interests, and thus supporting a restrictive attitude of Courts in the recognition of new kinds of property rights as a way to protect the “fundamental principle of unity that underlines modern property law”³⁶.

Given the above, it seems possible to conclude that throughout the systems of the western legal tradition the doctrine of *numerus clausus* reflects the partition between rights over the exclusive use of an asset – relevant *erga omnes* and disciplined by the Law of Property – and rights to performance expected from a debtor – relevant in the personal relation with the creditor, regulated under the Law of Obligations –, and functionally operates as a “filter” that determines, among individuals’ agreements, which right can be a property right and which can not³⁷. This dichotomous treatment clearly restricts parties’ ability to select judicial remedies and third party effects for the content of their transactions³⁸: what emerges is then a limit to contractual autonomy³⁹ that needs to be constantly justified in order to be accepted as a coherent policy principle of the legal system.

individual liberty. [...] The law limits freedom of contract to ensure that ownership have sufficient powers over their own property”.

³⁵ *Id.*, at 304.

³⁶ Depoorter, B.W.F. & Parisi, F. “Fragmentation of Property Rights: A Functional Interpretation of the Law of Servitudes.” *Global Jurist Frontiers* 3.1 (2003): 1, 13; for the North American debate, see, for a first reference, Merryman, J.H. “Policy, Autonomy and the *Numerus Clausus* in Italian and American Property Law.” *Am. Journ. Comp. Law* 12 (1963): 224; more recently Merrill, T.W. & Smith, H.E. “Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle.” *Yale Law Journ.* 110 (2000): 1; Hansmann, H. & Kraakman, R. “Property, Contract, and Verification: the *Numerus Clausus* Problem and the Divisibility of Rights.” *Journ. Leg. Stud.* 31 (2002): 373.

³⁷ Akkermans, B. *The Principle of Numerus Clausus in European Property Law*. *supra* note 2, at 409; van Erp, S. “European and National Property Law: Osmosis or Growing Antagonism?.” *Walter van Gerven Lecture* 6 (2006), 14; Bartels, S. & Milo, M. “Contents of Real Right: Personal or Proprietary. A Principled History.” *supra* note 7, at 15 ff.

³⁸ Parisi, F. “Freedom of Contract and the Laws of Entropy.” *Supreme Court Econ. Rev.* 10 (2002): 65.

³⁹ For this perspective, see recently Struycken, T.H.D. “The *Numerus Clausus* and Party Autonomy in the Law of Property.” *supra* note 7, at 69 and 80 ff.: “A comparative analysis shows that all legal systems have articulated rules on the creation of property rights and a catalogue of specific types of property interests. Full party autonomy seems to be anathema to property law”.

III. *NUMERUS CLAUSUS*: IN SEARCH OF A RATIONALE

Making the final consideration of the last Section more explicit, once the idea is accepted that the operational aspects of the *numerus clausus* doctrine impose a relevant restriction in the sphere of individuals' contractual freedom, it seems automatic to look for a rationale that can explain why legal systems should remain adherent to its prescriptions. In this sense, a law & economics approach reveals itself as extremely useful for verifying the existence of an efficiency foundation of the principle, capable of explaining its application even in terms of compared costs and benefits.

A. "The mystery of *numerus clausus*"

In a famous article published in 1987, Bernard Rudden examined the *numerus clausus* principle as effectively operating from a comparative perspective, concluding that, although it was possible to suggest different economic explanations autonomously supporting the idea of a closed set of property relations, none of them appeared sufficient to give it a solid and unitary rationale for a legal scholar⁴⁰.

As it has been subsequently pointed out, one of the main difficulties generally encountered by legal economists in understanding the rationale of the principle seems to be connected to the peculiar concept of "property rights" accepted as the starting point of their analysis⁴¹. In more detail, underlying the traditional law & economics approach can be easily perceived the great influence played by the Legal Realistic movement, and in particular the conceptual distinction between "paucital right" (or right *in personam*) and "multital right" (or right *in rem*)⁴², fundamental for the

⁴⁰ Rudden, B. "Economic Theory v. Property Law: The Numerus Clausus Problem." *supra* note 16, 241: the relevant explanations of the *numerus clausus* briefly suggested by the author will be discussed in detail in the rest of the survey conducted in this Section.

⁴¹ See Merrill, T.W. & Smith, H.E. "What Happened to Property in Law and Economics?." *Yale Law Journ.* 111 (2001): 357, 385, coining the expression here used as title for Section III.A ("The Mystery of the Numerus Clausus"); and also Cole, D.H. & Grossman, P.Z. "The Meaning of Property Rights: Law versus Economics?." *Land Economics* 78 (2002): 317.

⁴² See in particular Hohfeld, W.N. "Fundamental Legal Conceptions as Applied in Judicial Reasoning." *Yale Law Journ.* 26 (1917): 710, at 718 "A paucital right, or claim, (right *in personam*) is either a unique right residing in a person (or group of persons) and availing against a single person (or single group of persons); or else it is one of a few fundamentally similar, yet separate, rights availing respectively against a few definite persons. A multital right, or claim, (right *in rem*) is always one of a large class of fundamentally similar yet separate rights, actual and potential, residing in a single person

comprehension of property as a bundle of faculties that tie the owner to an indefinite class of people. As we can read in a classic survey of the economic literature,

“property rights do not refer to relations between men and things but, rather, to the sanctioned behavioural relations among men that arise from the existence of things and pertain to their use. Property rights assignments specify the norms of behaviour with respect to things that each and every person must observe in his interactions with other persons, or bear the cost for non-observance”⁴³.

Although extremely useful as a means to provide legal economists with a plastic view of the entitlement-concept that has proved essential in several important achievements⁴⁴, this two-party vision of property rights weakens their *in rem* nature – or “thingness”, as Heller calls it⁴⁵ – and makes them qualitatively similar to relative rights, as mere legal standards regulating personal relations between subjects⁴⁶. Without a strong conceptual distinction between property and obligational rights, *numerus clausus* can have no practical function, and, as a consequence, the limits on contractual freedom that it necessarily implies end up losing any possible rational justification⁴⁷.

(or single group of persons) but availing respectively against persons constituting a very large and indefinite class of people”; for a subsequent re-interpretation, Radin, M. “A Restatement of Hohfeld.” *Harv. L. Rev.* 51 (1938): 1141; and for an historic overview of the theory Banner, S. *American Property. A History of How, Why, and What We Own*. Cambridge-London: Harv. University Press, 2011, 45.

⁴³ Furubotn, E.G. & Pejovich, S. “Property Rights and Economic Theory: A Survey of Recent Literature.” *Journ. Econ. Lit.* 10 (1972): 1173 (original emphasis).

⁴⁴ It is here sufficient to recall the classic work of Coase, R.H. “The Problem of Social Cost.” *Journ. Law & Econ.* 3 (1960): 1, at 44: “[w]e may speak of a person owning land and using it as a factor of production but what the land-owner in fact possesses is the right to carry out a circumscribed list of actions” (emphasis added).

⁴⁵ Heller, M.A. “The Boundaries of Private Property.” *supra* note 3, at 1193, adding that “[a]s long as theorists and the Court rely on the bundle-of-legal-relations metaphor, they need some analytical tool to distinguish things from fragments, bundles from rights, and private from nonprivate property”.

⁴⁶ In critic terms, Penner, J.E. *The Idea of Property in Law*. Oxford: Clarendon Press, 1997, 23; Merrill, T.W. & Smith, H.E. “The Property/Contract Interface.” *Colum. Law Rev.* 101 (2001): 773, 780 ff.; and more recently, Smith, H.E. “Property as the Law of Things.” *Harv. Law Rev.* 125 (2012): 1691, 1694 ff.

⁴⁷ It is here worth returning to the already mentioned filtering role of the *numerus clausus* principle, clarifying that “[o]nly in a system where there is a distinction between property rights and personal rights and, connected to that, between the law of property and the law of obligations, does using such a filter makes sense”: Akkermans, B. *The Principle of Numerus Clausus in European Property Law*. *supra* note 2, at 409.

In this sense, the general scepticism shown by the traditional economic analysis of law towards any kind of authoritative restriction imposed on individuals' ability to define the contents of their property transactions appears understandable: in a competitive free market it is only through the system of prices that parties allocate any economic faculty to those who value it the most, thus maximising overall social utility⁴⁸. In any given negotiation, at least when transaction costs are not too high to prevent the agreement, the optimal extent of any entitlement will result from a process of fragmentation of the owner's original bundle, so that each burden imposed on his exclusive faculties is mirrored by a reduction in their transfer price⁴⁹.

B. *Efficient allocation of property rights: numerus clausus*
as organizational principle

It is then of no surprise that concrete attempts to detect an efficiency rationale in the *numerus clausus* have come only from those researches that have more specifically focused on the peculiar feature of property rights previously described (Section II.A), which makes them relevant not only within the "jural correlative" of bilateral rights and duties⁵⁰, but extends their potential influence to the overall

⁴⁸ For a classic reference, see Demsetz, H. "The Exchange and Enforcement of Property Rights." *Journ. Law & Econ.* 7 (1964): 11.

⁴⁹ To express it with Coase, R.H. *The Firm, the Market and the Law*. Chicago: University of Chicago Press, 1988, at 12, "if rights to perform certain actions can be bought and sold, they will tend to be acquired by those for whom they are most valuable either for production or enjoyment. In this process, rights will be acquired, subdivided, and combined, so as to allow those actions to be carried out which bring about that outcome which has the greatest value on the market. [...] Of course, in the process of acquisition, subdivision, and combination, the increase in the value of the outcome which a new constellation of rights allows has to be matched against the costs of carrying out the transactions needed to achieve a new constellation, and such rearrangement of rights will only be undertaken if the cost of the transaction needed to achieve it is less than the increase in the value which such a rearrangement makes possible"; see also Alchian, A.A. "Pricing and Society." *The Institute of Economic Affairs. Occasional Paper* 17 (1967), 2, as cited by Rudden, B. "Economic Theory v. Property Law: The Numerus Clausus Problem." *supra* note 16, and in a juridical perspective, see Gambaro, A. "Western Property Law." *supra* note 24, at 53, according to whom "the incorporeal notion of property rights extends the number of individuals' rights that can be exchanged or traded".

⁵⁰ The text obviously refers to the thesis of "jural opposites and correlatives" formulated by Hohfeld, W.N. "Some Fundamental Legal Conceptions as Applied in Judicial Reasoning." *Yale Law Journ.* 23 (1913): 16.

process of allocation of economically relevant resources and to the systems of third parties' market relations⁵¹.

A first economic explanation coherently supporting the doctrine of the *numerus clausus* moves from the recognition of what Ugo Mattei has defined the "permanent impact factor"⁵² of a property right, that enables its holder to influence future generations' choice of allocation of resources, thus preventing, at least potentially, their efficient re-employment over time and through changed conditions⁵³. In this sense, adopting Michelman's definition of an "anticommon", Michael Heller suggests that "real rights" can also be defined as

"a type of property in which everyone always has rights respecting the objects in the regime, and no one, consequently, is ever privileged to use any of them except as particularly authorized by others"⁵⁴.

Looking at real rights as rights shielded by a property rule, it appears coherent to conclude that their proliferation determines a fragmentation of decision making and veto powers among different right-holders of an asset, with potential limits in its efficient enjoyment across time and space and the subsequent decline in the value of economic resources as predicted by the supporters of the "tragedy of the anticommons"⁵⁵. At the bottom of this theory stands the idea that property is subject to a fundamental law of entropy, being affected by a one-directional bias leading towards increasing fragmentation⁵⁶: even when a reunification of the bundle of rights would be efficient, this will be generally prevented by the fact that transaction costs

⁵¹ For essential references, Stake, J.E. "Decomposition of Property Rights." *Encyclopedia of Law and Economics*. Eds. Bouckaert, B. & De Geest, G. vol. II. Cheltenham: Elgar, 2000, 32.

⁵² Mattei, U. *Basic Principles of Property Law*. *supra* note 6, at 39.

⁵³ In this sense, the themes here analysed can be presented under the common heading of "the problem of the future": see Mahoney, J.D. "Perpetual Restrictions on Land and the Problem of the Future." *Va. Law Rev.* 88 (2002): 739.

⁵⁴ The definition is taken from Michelman, F.I. "Ethics, Economics and the Law of Property." *Nomos* 24 (1982): 3, 6; for the first re-interpretation, see Heller, M.A. "The Tragedy of Anticommons: Property in Transition from Marx to Markets." *Harv. Law Rev.* 111 (1998): 621.

⁵⁵ See Heller, M.A. "The Boundaries of Private Property." *supra* note 3, at 1176 ff.; Parisi, F. Schulz, N. & Depoorter, B.W.F. "Duality in Property: Commons and Anticommons." *Int. Rev. Law & Econ.* 25 (2005): 578, 590.

⁵⁶ Parisi, F. "Entropy in Property." *Am. Journ. Comp. Law* 50 (2002): 595.

necessary to coordinate co-owners are raised by the interdependence of their strategic, non-conforming positions and by their consequent opportunistic behaviours⁵⁷.

A detailed consideration of this approach finds the rationale of *numerus clausus* to be in the general interest to grant an efficient interpersonal allocation of exclusive faculties over economic resources that would be compromised by a proliferation of atypical “fancies”, contractually conformed and disciplined as autonomous real rights⁵⁸. This is why modern legal systems must limit the permissible level of functional property fragmentation, providing property-type protection only for those rights that specifically meet stable and socially desirable property interests. In doing so, *numerus clausus* stands as a defence that all western legal systems adopt against the problem of “dead-hand control”⁵⁹, aiming to prevent that fragmentation choices made by present right-holders might frustrate future generations’ ability in defining the optimal content of their property relations⁶⁰.

Although authoritatively supported, the effect of this theory in explaining *numerus clausus* as a valid policy principle is still debated. In particular, criticism has come from those authors who have challenged the idea that fragmentation and anticommons-type problems can be effectively solved just by closing the list of

⁵⁷ With particular reference to hold-out and free-riding problems: for an essential survey, Schäfer, H.B. & Ott, C. *The Economic Analysis of Civil Law*. Cheltenham: Elgar, 2004, 422, and see also Hansmann, H. & Kraakman, R. “Property, Contract, and Verification: the *Numerus Clausus* Problem and the Divisibility of Rights.” *supra* note 36, at 418, note 90, who briefly describe the phenomenon with the concept of “retransfer externalities”: “[a]fter an initial division of property rights in an asset, the holder of one of the partial rights does not bear the full anticommons-type costs of further subdivision of that right, since those costs will in part fall on other holders of the previously divided partial rights in the asset”.

⁵⁸ Ziff, B. “The Irreversibility of Commodification.” *Stellenbosch Law Rev.* 16 (2005): 283.

⁵⁹ Simes, L.M. *Public Policy and the Dead Hand: Five Lectures Delivered at the University of Michigan February 7, 8, 9, 14, and 15, 1955*. Ann Arbor: University of Michigan Law School, 1955, 59: “[i]t is socially desirable that the wealth of the world be controlled by its living members and not by the dead”.

⁶⁰ See Heller, M.A. “The Boundaries of Private Property.” *supra* note 3, at 1177: “[b]y putting property in tail, owners attempted to control resources beyond their lifetimes, thereby placing the costs of the resulting decrease in productivity on future generations and on society. In a complex story, judges minimized the social costs of this intertemporal fragmentation by limiting the tail”; and Van Houweling, M.S. “The New Servitudes.” *Georgetown Law Journ.* 96 (2008): 885, 903, who underlines that the dead-hand control can justify the principle of *numerus clausus* more coherently than the generally alleged problem of the restraint of alienation that a decomposition of property might produce: “the problem is not so much restraint on alienation as restraint on acquisition: every individual property stick can be sold; the difficulty is buying a bundle that is useful to own”.

enforceable real rights: while it is clear that legal systems must guarantee a constant efficient allocation of property rights, it is highly questionable if this achievement can be practically reached through a doctrine that limits only the *types* of rights recognized as “property” by Legislators, and not the number of potential rights-holders of exclusive faculties on a single asset⁶¹.

In this regard, it appears correct to affirm that this kind of organizational issues in the allocation of property is certainly relevant in modern systems of law, but generally regulated not through an *ex ante* limitation of the available set of rights, but rather by *ex post* mechanisms facilitating elimination of a fragmentation that has become inefficient, known both in civil and in common law traditions: mandatory takings and licences, rules of desuetude, adverse possession, judicial power to dissolve legal entities⁶², and, in the field of intellectual property, statutory limitations on the lifetime of copyright and patents, first-sale and work for-hire doctrines⁶³.

C. *Efficient coordination of individuals' activity: numerus clausus*
as informational principle

The conclusion of the last paragraph suggests looking for a different rationale for *numerus clausus*, not exclusively connected to the problem here referred to as

⁶¹ Merrill, T.W. & Smith, H.E. “Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle.” *supra* note 36, at 51 ff.; and more recently, Davidson, N.M. “Standardization and Pluralism in Property Law.” *Vand. Law Rev.* 61 (2008): 1597, 1627, concluding that “[t]here is a mismatch, however, between the problem of fragmentation and the solution offered by the *numerus clausus*. Standardization in property law may limit types of interests, but standardization does not meaningfully reduce the number of interest holders or the subdivision of physical property, which are the primary triggers for the cycle of the anticommons”.

⁶² Hansmann, H. & Kraakman, R. “Property, Contract, and Verification: the *Numerus Clausus* Problem and the Divisibility of Rights.” *supra* note 36, at 418; Thompson Jr., B.H. “The Trouble with Time: Influencing and Conservation Choices of Future Generations.” *Nat. Res. Journ.* 44 (2004): 601; and in the continental debate, see Gambaro, A. “Note sul principio di tipicità dei diritti reali.” *Clausole e principi generali nell’argomentazione giurisprudenziale degli anni novanta*. Eds. Cabella-Pisu, L. & Nanni, L. Padova: Cedam, 1998, 229.

⁶³ With specific regard to these last rules, see, among others, Van Houweling, M.S. “The New Servitudes.” *supra* note 60, at 910 ff. (for a survey of the evolution of U.S. jurisprudence in Copyright and Patent Law); and Ead. “Author Autonomy and Atomism in Copyright Law.” *supra* note 4, at 563, explaining that “work-for-hire doctrine also has a role to play in modulating fragmentation”, since “it can also operate to unify ownership where multiple employees have labored together on a single work (e.g., a crew working on a movie), or on components that might both stand on their own and be combined into a larger work (e.g., encyclopedia entries or newspaper articles)”.

“organizational”, tied to the permanent impact factor of property, but rather focusing on the “coordination” issues that may be determined by rights that stand *erga omnes*, and that are capable of binding third parties without their consent, running with the asset throughout its market circulation. From this perspective, the rationale of the principle can be connected with “informational” issues, aiming to assure an acceptable level of predictability and certainty with regard to the presence and the exact extent of the property rights potentially insisting on negotiable resources⁶⁴.

1. *Numerus clausus* as optimal standardization of property rights

The analysis pursued in a series of influential articles by Thomas Merrill and Henry Smith moves from the consideration that property rights – as rights referring to a specific asset and good against all the world – present a potentially massive coordination problem, given the fact that each right-holder has claim towards a large and indefinite number of potential violators and at the same time must respect the *in rem* rights of a large and indefinite class of others⁶⁵. In more detail; the authors focus on a famous common law case, *Keppell v. Bailey* (1834), in which the recognition as “real” of an atypical contractual right was refused on the ground that

“great detriment would arise and much confusion of rights if parties were allowed to invent new modes of holding and enjoying real property, and to impress upon their lands and tenements a peculiar character, which should follow them into all hands, however remote. Every close, every messuage, might thus be held in a several fashion; *and it would hardly be possible to know what rights the acquisition of any parcel conferred, or what obligations it imposed*”⁶⁶.

⁶⁴ See Bartels, S. & Milo, M. “Contents of Real Right: Personal or Proprietary. A Principled History.” *supra* note 7, at 17 f.; Morello, U. “Tipicità e numero chiuso dei diritti reali.” *Trattato dei diritti reali*. Eds. Gambaro, A. & Morello, U. vol. I. Milano: Giuffrè, 2008, 67 ff., 111.

⁶⁵ Merrill, T.W. & Smith, H.E. “Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle.” *supra* note 36, 1 ff.; Idd. “What Happened to Property in Law and Economics?.” *supra* note 41, at 385 ff.; Idd. “The Property/Contract Interface.” *supra* note 46, at 788.

⁶⁶ *Keppell v. Bailey*, 39 Eng. Rep. 1042, 1049 (1834) (emphasis added).

From this perspective, what emerges is the informational problem connected to the free creation of entitlements that are relevant *erga omnes*: when external parties, different from those who have entered a specific contractual agreement, wish to purchase certain rights or simply to avoid violating them, they always have to inquire about who holds them, what is their effective extent, whether there are burdens or exceptions that limit their use, and so on.

In this regard, *numerus clausus* is seen as a regulatory principle preventing an uncontrolled rise of “measurement costs” that would otherwise be necessary for perspective transferees to understand the nature and exact features of the rights they negotiate, or for potential injurers to avoid the expected costs of tort liability⁶⁷. At the same time, since the limits on contractual freedom represent themselves as a burden imposed on the parties’ ability, this theory does not focus on a static list of available property rights, but suggests that legal systems should treat as “property” only those rights that, from time to time, represent well defined, socially relevant (and thus typical) interests, so that the increase in measurement costs that they determine can be compensated by the benefits connected to the reduction of “frustration costs” assured by their recognition.

The result is an “optimal standardization” of property rights, which requires a dynamic approach, fostered by the legislator, but necessarily implemented through case-made law⁶⁸, that can focus on the middle point of a spectrum that ranges from total freedom of customization, on the one hand, to complete regimentation on the other⁶⁹.

⁶⁷ Merrill, T.W. & Smith, H.E. “Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle.” *supra* note 36, at 26: “[w]hether the objective is to avoid liability or to acquire rights, an individual will measure the property rights until the marginal costs of additional measurement equal the marginal benefits. When seeking to avoid liability, the actor will seek to minimize the sum of the costs of liability for violations of rights and the costs of avoiding those violations through measurement. In the potential transfer situation, the individual will measure as long as the marginal benefit in reduced error costs exceeds the marginal cost of measurement”.

⁶⁸ In this sense, see Munzer, S.R. “Commons and Anticommons in the Law and Theory of Property.” *supra* note 31, at 157.

⁶⁹ Merrill, T.W. & Smith, H.E. “Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle.” *supra* note 36, at 38.

2. *Numerus clausus* and control on property rights' "verification costs"

The undoubted merit of the above surveyed theory is to show that an "informational" perspective seems capable of catching the economic rationale of the *numerus clausus* principle more precisely than analyses focused merely on "organizational" issues. At the same time, once we accept the idea that the restrictive attitude towards property rights reflects the general interest of legal systems to coordinate individuals' activity, we must observe that standardization is just *one* of the possible legal techniques available to reduce communication costs and guarantee transparency in commercial transactions.

Significantly, even remaining in the common law tradition of *Keppel v. Bailey*, it is worth noticing that just a few years afterwards, in the leading case *Tulk v. Moxhay* (1848), the Court of Chancery recognized that a covenant between two contractual parties, although not formally recognized as real, could

"be enforced in equity against all subsequent purchasers with notice, independently of the question whether it be one which runs with the land so as to be binding upon subsequent purchasers at law"⁷⁰.

Irrespective of the distinction between principles of equity and the discipline of property rights as regulated at law⁷¹, what matters here is to emphasize that this line of reasoning offers the interpreter a potential alternative operational rule to solve the informational problem associated with the principle of *numerus clausus*. Instead of recognising as "property" only those interests that appear socially relevant, and thus standardized, it is also possible to create a system of publicity so as to give clear

⁷⁰ *Tulk v. Moxhay*, 41 Eng. Rep. 1143 (1848).

⁷¹ See Megarry & Wade - *The Law of Real Property*. *supra* note 18, § 4.001. In general terms, it is certainly true that in many cases "equity invades property law by turning personal rights (such as claims for delivery) into property rights": Milo, M.J. "Property and real rights." *supra* note 20, at 589. At the same time, it must not be undervalued that, at least for English common law, the reform legislation of 1925, in addition to reducing the number of possible estates, has significantly provided for several equitable interests to be detached from the land: as observed by Garro, A.M. "Recordation of Interest in Land." *supra* note 33, at 69, note 351: "the Law of Property Act, 1925 turned, by legislative fiat, equitable interests traditionally viewed as rights *in rem*, *i.e.* interest in realty, into rights *in personam*, *i.e.* rights in personalty, *e.g.* money"; see also Dixon, M. "Proprietary and Non-Proprietary Rights in Modern Land Law." *Land Law. Issues, Debates, Policies*. Ed. Tee, L. Portland: Willan, 2002, 26.

notice to prospective contractors and third parties of the existence and precise latitude of property rights over marketable resources. As observed by Richard Epstein in his analysis of the Law of Servitudes,

“the only need for public regulation, either judicial or legislative, is to provide notice by recordation of the interests privately created”⁷².

In this conceptual framework, Henry Hansmann and Reiner Kraakman elaborate their theory of “verification costs”: *numerus clausus* can be considered a general policy principle aiming to minimize the inquiry costs that parties must face in order to have a clear view of the exact content of the right they are contracting on⁷³. In particular, looking at property rights as rights which run with the asset on which they insist⁷⁴, the *numerus clausus* is the result of a compared analysis between the benefits deriving from the contractual tailoring of new kinds of *in rem* rights and the overall system costs necessary to provide their notice to third parties:

“[t]his means that it is efficient to alter a property rights regime to provide more accommodating verification rules for a particular type of property right only if the resulting reduction in user costs, plus the increase in the aggregate value of assets that results from more extensive use of the right in question, exceeds the concomitant increase in the sum of nonuser costs and system costs”⁷⁵.

For the tasks of the present analysis, it must be stressed that also this approach to the problem, although operatively different from previously surveyed the theory of “measurement costs”, moves from a similar recognition of the importance of informational aspects connected with the emergence and proliferation

⁷² Epstein, R.A. “Notice and Freedom of Contract in the Law of Servitudes.” *S. Cal. Law Rev.* 55 (1982): 1353.

⁷³ Hansmann, H. & Kraakman, R. “Property, Contract, and Verification: the *Numerus Clausus* Problem and the Divisibility of Rights.” *supra* note 36, at 373 ff.

⁷⁴ See also Hansmann, H. & Santilli, M. “Authors’ and Artists’ Moral Rights: a Comparative Legal and Economic Analysis.” *Journ. Legal Stud.* 26 (1997): 95, 100 ff.

⁷⁵ Hansmann, H. & Kraakman, R. “Property, Contract, and Verification: the *Numerus Clausus* Problem and the Divisibility of Rights.” *supra* note 36, at 397.

of property rights⁷⁶, relegating organizational and allocation issues in the background of the *numerus clausus* policy interpretation.

IV. THE *NUMERUS CLAUSUS* PRINCIPLE AND INTELLECTUAL PROPERTY RIGHTS

As explained in the preceding Sections, in its “classic” application – particularly relevant to the legal tradition of continental Europe, but not unknown in common law – the doctrine of *numerus clausus* basically refers to the closed set of *secondary* property rights that can be contractually derived from the *primary* right on things, represented by the right of ownership⁷⁷. It is then of no surprise that the different economic explanations that have been provided for the principle appear easier to understand from a legal perspective when applied to the control of the contractual fragmentation of rights in the traditional realm of *in rem* relations, where their functional interpretation suggests, even to continental European scholars, the abandonment of a rigid approach in favour of a more dynamic process of evolutionary standardization of property rights over material things, referred to as the “*numerus quasi-clausus* doctrine”⁷⁸.

On the other hand, as it will be further discussed in this Section, the pattern just surveyed is not the one traditionally detected in the field of intangible resources, where, at least at a declamatory level, the owner of a *primary* intellectual property right is not considered bound in his contractual freedom and can thus intensively exploit

⁷⁶ In this sense it is possible to understand the criticism to the corollaries of the verification cost approach: see Smith, H.E. “Property and Property Rules.” *N.Y.U. Law Rev.* 79 (2004): 1719, at 1768, note 174: “Hansmann and Kraakman propose a supposedly different approach to the *numerus clausus* based on ‘verification’, without recognizing that verification costs are a (proper) subset of the information costs upon which our theory is based”; and more recently, Id., “Standardization in Property Law.” *Research Handbook on the Economics of Property Law*. Eds. Ayotte, K. & Smith, H.E. Cheltenham: Elgar, 2011, 148. On the interplay between information costs and systems of verification (with particular regard to land registration), see also van Erp, S. “Comparative Property Law.” *supra* note 11, at 1049: “A land registry does not function efficiently if the information that is made available is not – at least to a certain degree – standardized”.

⁷⁷ For a recent detailed analysis throughout civil and common law systems, Akkermans, B. *The Principle of Numerus Clausus in European Property Law*. *supra* note 2, at 417 ff.

⁷⁸ van Erp, S. “A *Numerus Quasi-Clausus* of Property Rights as a Constitutive Element of a Future European Property Law.” *supra* note 2, at 9 ff.

his original faculties by tailoring, through the licensing-agreement, a potential indefinite class of *secondary* rights and transfer them to third parties. This induces investigation of the reasons, and the possible rationales, of this ambivalent role of the principle: once we assume that the *numerus clausus* may provide specific regulatory functions, is it possible (or socially desirable) to apply them in order to efficiently define the role and the scope of contractual relations over intangible assets? In a nutshell: what are, if there are any, the interrelations between the rationales of *numerus clausus*, as recognized in the classic Law of Property, and the operational rule of contractual practices on intellectual property rights?

A. Numerus clausus of *primary intellectual property rights*

As hinted in the Introduction, when referred to intellectual property, the doctrine of *numerus clausus* has been generally interpreted in a very peculiar way, focusing on the available classes of *primary* exclusive rights over intangible assets that legal systems recognize. In this regard, the filtering role assigned to the principle in the western legal tradition seems to be exclusively intended to assure individuals a constant freedom in the exploitation of knowledge-based resources, disciplined under a mandatory default-regime of common use that can be subject only to a limited series of exceptions specifically indicated by the Law⁷⁹.

From this point of view, in the field of intellectual property what appears “closed” is just the number of exclusive rights according to which economic faculties over intangible assets can be subtracted from the free availability of each individual. At least at a declamatory level, defining the conditions for the enforcement of each scheme of primary intellectual property rights (*e.g.* Copyright, Trademark, Patent,

⁷⁹ On this topic, among the most recent analyses, Stevens, R. “Party Autonomy and Property Rights.” *supra* note 31, at 86 f.; Hess, C. & Ostrom, E. “Introduction: An Overview of the Knowledge Commons.” *Understanding Knowledge as a Commons. From Theory to Practice*. Eds. Eadd. Cambridge-London: MIT Press, 2007, 3; for a civilian perspective, see in Germany Jänich, V. *Geistiges Eigentum – eine Komplementärererscheinung zum Sacheigentum?*. *supra* note 22, at 234 ff.; Peukert, A. “Güterzuordnung und Freiheitsschutz.” *Geistiges Eigentum. Herausforderung Durchsetzung*. Eds. Hilty, R.M. Jaeger, T. & Kitz, V. Berlin-Heidelberg: Springer, 2008, 47; in Italy, Zeno-Zencovich, V. “Personalità (diritti della).” *Digesto discipline privatistiche. Sez. civ.* vol. XIII. Torino: Utet, 1996, 430, 441; Auteri, P. “Diritti esclusivi sulle manifestazioni sportive e libertà d’informazione.” *AIDA* 11 (2003): 183, 190; Ghidini, G. *Profili evolutivi del diritto industriale*. 2nd ed. Milano: Giuffrè, 2008, 20.

etc.) represents a strategic choice that cannot be left to private contracts or case-made law⁸⁰, but must be exclusively assigned to the Legislators, who should always support the introduction of new kinds of monopoly-regime on information with a detailed analysis of their operative implications, especially in terms of compared social costs and benefits⁸¹. Put differently, it is possible to recognize a deliberate incompleteness in the system of rights over intangibles, in the sense that individuals cannot have the exclusive use of certain resources, although economically valuable, when this faculty is not explicitly disciplined by the Law, with the enforcement of a specific intellectual property right matched to it⁸².

This particular application of the principle of *numerus clausus*, although extremely relevant for the general organization of a legal system, does not influence in a direct way the present analysis: even focusing on the common terms of the law

⁸⁰ It is nonetheless worth noticing that the operational rules observable in comparative perspective show a constant process of “propertization” of knowledge-based resources, often guided by the role assumed by Courts’ decisions and contractual agreements in the definition of atypical intellectual property rights: see for a survey Ohly, A. “Gibt es einen Numerus clausus der Immaterialgüterrecht?” *Perspektiven des geistigen Eigentums und Wettbewerbsrecht. Festschrift für Gerhard Schricker zum 70. Geburtstag*. Eds. Ohly, A. Bodewig, T. & Dreier, T. München: Beck, 2005, 105; Ubertazzi, L.C. “Numerus clausus dei diritti esclusivi di proprietà intellettuale?” *AIDA* 17 (2009): 282; and in critic terms, Peukert, A. “Intellectual Property as an End in Itself?” *European Int. Prop. Rev.* 33 (2011): 67; Resta, G. “Nuovi beni immateriali e *numerus clausus* dei diritti esclusivi.” *Diritti esclusivi e ‘nuovi’ beni immateriali*. Ed. Id. Torino: Utet, 2011, 3; Id., “The Case Against the Privatization of Knowledge: Some Thoughts on the Myriad Genetics Controversy.” *Biotech Innovation and Fundamental Rights*. Eds. Bin, R. Lorenzon, S. & Lucchi, N. Berlin-Heidelberg: Springer, 2011, 11.

⁸¹ For critical analyses, see Lessig, L. “Re-crafting a Public Domain.” *Yale Journ. Law & Human.* 18 (Special Issue – 2006): 56; Balganes, S. “The Pragmatic Incrementalism of Common Law Intellectual Property.” *Vand. Law Rev.* 63 (2010): 2; for a survey of policy tendencies at the international level, Yu, S. “Political Privilege, Legal Right, or Public Policy Tool? A History of the Patent System.” *ATRIP Essay Competition* (2009), 38 ff. available at <http://www.atrip.org/Content/Essays/Sa%20Yu.pdf> [accessed September, 20, 2012], and with specific reference to the European context, Dietz, A. “Constitutional and Quasi-Constitutional Clauses for Justification of Authors’ Rights (Copyright).” *GRUR Int.* 55 (2006): 7; Geiger, C. ““Constitutionalising” Intellectual Property Law? The Influence of Fundamental Rights on Intellectual Property in the European Union.” *IIC* 37 (2006): 371; Id., “Intellectual Property shall be protected! – Article 17 (2) of the Charter of Fundamental Rights of the European Union: a Mysterious Provision.” *European Int. Prop. Rev.* 31 (2009): 113; Ubertazzi, L.C. “Introduzione al diritto europeo della proprietà intellettuale.” *Contratto e impresa/Europa* (2003): 1054, at 1100 ff. note 146.

⁸² In this regard, the doctrine of *numerus clausus* gets near to the economic analysis of the incompleteness of property rights: see, Allen, D.W. “The Rhino’s Horn: Incomplete Property Rights and the Optimal Value of an Asset.” *Journ. Leg. Stud.* 31 (2002): 339; Nicita, A. Rizzolli M. & Rossi, M.A. “Towards a Theory of Incomplete Property Rights.” (2005), available at www.ssrn.com; Nicita, A. “On Incomplete Property: A Missing Perspective in Law and Economics?” *Property Rights Dynamics: A Law and Economics Perspective*. Eds. Porrini, D. & Ramello, G.B. New York: Routledge, 2007, 77.

& economics approach to the problem, it is easy to perceive that the practical implications of the different theories above surveyed refer primarily to the divisibility of faculties over the use of a single asset, and only incidentally to the creation of new kinds of property structures over resources (previously) regulated as commons⁸³.

B. Numerus clausus of secondary intellectual property rights?

With specific regard to the scope of this analysis, it is then worth noticing that once a primary intellectual property has been recognized by the system, its owner is generally considered free not only to assign the whole bundle of rights to third parties⁸⁴, but also to select any combination of his economic faculties and to transfer it through the flexible instrument of the license-agreement.

These contractual practises enable the right-holder to tailor secondary intellectual rights, conforming to three basic dimensions – content, time and space⁸⁵ – and appear particularly relevant in the case of *exclusive* licenses, which give the transferee not only the right to use the intangible asset in the specific way conveyed with the licensor, but also to prevent the simultaneous exploitation of the same economic faculties by any other subsequent licensee or assignee of the primary right⁸⁶. In more detail, an exclusive license can thus be considered a contractual mechanism granting a limited “property” right over intangible capital, relevant *erga omnes* and running with the primary right from which it derives⁸⁷.

⁸³ This is certainly not to deny that also this latter theme can be analysed under an efficiency perspective: see among others Easterbrook, F.H. “Who Decides the Extent of Rights in Intellectual Property?.” *Expanding the Boundaries of Intellectual Property: Innovation Policy for the Knowledge Society*. Eds. Dreyfus, R. Zimmerman, D.L. & First, H. Oxford: Oxford University Press, 2001, 405.

⁸⁴ As we will see examining German Copyright Law, the whole transfer of a primary right may be in certain legal systems forbidden.

⁸⁵ For an essential reference, Nimmer, R.T. *Licensing of Intellectual Property and Other Information Assets*. 2nd ed. Newark: Lexis Nexis, 2007, 141 ff.; while for a detailed historic survey of the concept centered in the Nineteenth-Century Patent Doctrine, Mossoff, A. “A Simple Conveyance Rule for Complex Innovation.” *Tulsa Law Rev.* 44 (2009): 707, 714.

⁸⁶ Recently, an interesting analysis of licenses as “property interests” has been conducted on the basis of Hohfeld’s categorization (see, *supra* note 50) by Newman, C.F. “A License is not a “Contract not to Sue”: Disentangling Property and Contract in the Law of Copyright Licenses.” *George Mason Law & Economics Research Paper* 12-23 (2012), available at www.ssrn.com.

⁸⁷ In the North American literature, see Smith, H.E. “Institutions and Indirectness in Intellectual Property.” *U. Pa. Law Rev.* 157 (2009): 2083, 2119 ff.; Fellmeth, A.X. “Control Without Interest: State

In this sense, the absence of any mandatory prescription limiting the admissible types or extents of licensing agreement induces legal scholars to adhere to the idea that the principle of *numerus clausus* “is probably at its weakest in the area of intellectual property”⁸⁸: when looking in comparative perspective at the process of fragmentation of a primary right, it is in fact frequently alleged that the principle does not operate outside the field of “limited real rights” over tangible things⁸⁹.

This last consideration is commonly based on the “public good” economic nature of intangibles: given the fact that these resources show a *non-rivalrous* consumption (it being possible for every individual to use a piece of information without preventing the same potential exploitation for any other subject), it seems at first obvious to conclude that in this field the application of the *numerus clausus*, as a policy principle regulating the efficient interpersonal allocation of exclusive faculties, would lose its fundamental justification.

With a deeper analysis, this line of reasoning can be criticized from two different, although interrelated, perspectives.

Law of Assignment, Federal Preemption, and the Intellectual Property License.” *Va. Journ. Law & Tech.* 6 (2001): 8, and in comparative perspective, Hansmann, H. & Santilli, M. “Authors’ and Artists’ Moral Rights: a Comparative Legal and Economic Analysis.” *supra* note 74, at 95 ff. In the European tradition, the analysis of licensed rights on intellectual property as “real rights” has been particularly deepened in the German literature: see among others Forkel, H. *Gebundene Rechtsübertragungen. Ein Beitrag zu den Verfügungsgeschäften über Patent-, Muster-, Urheber- und Persönlichkeitsrechte.* Köln-Bonn-Berlin-München: Heymann, 1977, 49 ff. and more recently Gottzmann, S. *Sukzessionsschutz im Gewerblichen Rechtsschutz und Urheberrecht.* Köln-München: Heymann, 2008, 11.

⁸⁸ Merrill, T.W. & Smith, H.E. “Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle.” *supra* note 36, at 19.

⁸⁹ In the European continental debate, Forkel, H. *Gebundene Rechtsübertragungen. Ein Beitrag zu den Verfügungsgeschäften über Patent-, Muster-, Urheber- und Persönlichkeitsrechte.* *supra* note 87, at 67 ff.; Ohly, A. “Gibt es einen *Numerus clausus* der Immaterialgüterrecht?” *supra* note 80, at 107; Rehbinder, M. *Urheberrecht.* 16th ed. München: Beck, 2010, § 560, 218 f.; and for a detailed analysis, in the Italian literature, Zoppini, A. “Le “nuove proprietà” nella trasmissione ereditaria della ricchezza (note a margine della teoria dei beni).” *Riv. dir. civ.* I (2000): 185, 237, note 195; Resta, G. *Autonomia privata e diritti della personalità.* Napoli: Jovene, 2005, 334 ff., note 223; in common law systems is frequently emphasized the role played by different legal rules in (partially) counterbalancing the absence of the traditional anti-fragmentation effect provided by *numerus clausus*: as examples, consider the first sale doctrine (“limiting the complexity of the non-possessory rights attached to physical objects that embody copyrighted works”: Van Houweling, M.S. “Author Autonomy and Atomism in Copyright Law.” *supra* note 4, at 562, 603) and the prohibition of copyright servitudes (“preventing copyright owners from imposing post-sale restrictions on the use of copies”: see “A Justification for Allowing Fragmentation in Copyright.” *supra* note 4, at 1753, 1761, 1771).

Firstly, while the idea cannot be challenged that the absence of scarcity removes one of the traditional grounds supporting the original recognition of a property regime⁹⁰, at the same time it is clear that an exclusive license over an already recognized primary right represent a juridical constraint capable of producing an artificial effect of rivalry that can prevent the free exploitation of the intangible asset for those who have not acquired the approval of its owner⁹¹. It is thus necessary to admit that even in the field of intellectual property, regulatory organizational issues may arise, connected to the potentially inefficient allocation of fragmented monopoly-rights spread through different individuals, as shown, among others, by influential analyses focused on the branch of biomedical research⁹². Here we see a first interrelation between intellectual property licenses and one of the lessons derived from the economic analysis of the *numerus clausus*: the point is not to deny the presence and the potential relevance of organizational problems in the allocation of entitlements, but to confute that they can be effectively faced just by reducing the number of types of limited intellectual property rights available for the contracting parties⁹³.

Secondly, and mainly, the thesis here examined seems to completely underestimate the “informational” role of the *numerus clausus*, as a regulatory doctrine aiming to grant the overall principles of clearness and transparency on which a well organized system of market transactions should rely, even in the field of knowledge-

⁹⁰ In the classic law & economics approach, Demsetz, H. “Toward a Theory of Property Rights.” *Am. Econ. Rev.* 62 (1967): 347; Cooter, R.D. “Inventing Market Property: The Land Courts of Papua New Guinea.” *Law & Society Rev.* 25 (1991): 759; Barzel, Y. *Economic Analysis of Property Rights*. 2nd ed. Cambridge: Cambridge University Press, 1997.

⁹¹ See Easterbrook, F.H. “Intellectual Property Is Still Property.” *Harv. Journ. Law & Pub. Pol.* 13 (1990): 108; and in a different perspective Boyle, J. *The Public Domain. Enclosing the Commons of the Mind* New Heaven-London: Yale University Press, 2008, 4, underlining the “market making” function of the normative creation of an exclusivity regime.

⁹² Heller, M.A. & Eisenberg, R.S. “Can Patents Deter Innovation? The Anticommons in Biomedical Research.” *Science* 280 (1998): 698; and see also Rai, A.K. & Eisenberg, R.S. “Bayh-Dole Reform and the Progress of Biomedicine.” *Law & Cont. Prob's* 66 (2003): 289; and in the field of cyberspace regulation, Natke, J.W. “Collapsing Copyright Divisibility: a Proposal for Situational or Medium Specific Indivisibility.” *Mich. St. Law Rev.* (2007): 483; Van Houweling, M.S. “The New Servitudes.” *supra* note 60, at 885 ff., note 9.

⁹³ See for a particular application Li-Dar Wang, R. “Biomedical Upstream Patenting and Scientific Research: The Case for Compulsory Licenses Bearing Reach-Through Royalties.” *Yale Journ. Law & Tech.* 10 (2008): 251, 306 ff., 318 ff., requiring a series of doctrines that assure an *ex-post* efficient enjoyment of the economic faculties associated with the immaterial resource, disciplining anticommons fragmentation and opportunistic behaviours.

based resources⁹⁴. In other words, the complete irrelevance of these issues in the sphere of intellectual property would imply an uncontrolled proliferation of secondary rights standing against all potential subsequent assignees or licensees of an intangible asset, even in the absence of any publicity mechanism that could guarantee their reliance on the content of the title negotiated⁹⁵. Through the lens of informational issues, the regulatory role of the *numerus clausus* seems thus to be the same in the traditional real property regime and in the field of intangible assets: put simply, the potential acquirer of a piece of land is interested in knowing which kind of real right may insist on it (and would bind him after the purchase) in exactly the same way as the potential assignee of a Copyright (Trademark, Patent, etc.) may wish to predict which secondary rights have been derived from the original bundle of intellectual faculties (and could bind him after the assignment).

It is, then, necessary to apply a better test to the doctrinal conclusion exposed here through analysis of the operational rules applied in the juridical enforcement of licensing agreements, in order to understand whether the contractual freedom to tailor secondary intellectual property rights can be effectively released from any regulatory framework or rather if, on the contrary, it must be constantly balanced with the general interest for an effective predictability of the number and extent of limited rights that insists on a single immaterial asset and that can prevent its full enjoyment to prospective acquirers.

⁹⁴ In this regard, it is significant to recall the example made by Hansmann, H. & Kraakman, R. "Property, Contract, and Verification: the *Numerus Clausus* Problem and the Divisibility of Rights." *supra* note 36, at 385 ff., to support their thesis of verification costs, centered on the artist's rights of integrity or resale royalty; but see also, with a different approach, Long, C. "Information Costs in Patent and Copyright." *Va. Law Rev.* 90 (2004): 465, 489 ff.

⁹⁵ See Kraßer, R. "Die Wirkung einfachen Patentlizenz." *GRUR Int.* (1983): 537, 540; Gottzmann, S. *Sukzessionschutz im Gewerblichen Rechtsschutz und Urheberrecht. supra* note 87, at 17 f. ("Im Immaterialgüterrecht kann die Erfüllung eines Publizitätstatbestandes für das Vorliegen einer Verfügung somit nicht gefordert werden"); Ricolfi, M. *Il contratto di merchandising nel diritto dei segni distintivi*, Milano: Giuffrè, 1991, 442.

V. LICENSING AGREEMENT ON COPYRIGHT:

A COMPARATIVE PERSPECTIVE

For this task, it appears extremely useful to focus the analysis on the specific branch of Copyright, whose international recognition, according to the Berne Convention for the Protection of Literary and Artistic Works, is disciplined as a direct consequence of the act of creation, assuring the author the enjoyment of his rights without being subject to any further formality⁹⁶. From this principle has consequently descended the traditional tendency, visible in this field more than in any other area of intellectual property law, to limit (or even to exclude) the general relevance, constitutive or merely declaratory, of a system of registries and publicity annotations⁹⁷.

In the present Section, I will then examine two formally different, and for certain significant aspects antithetical, legal systems (the U.S. Federal Copyright Law and the German *Urheberrechtsgesetz*) in order to possibly detect the presence of common operational rules connected to the informational role of the principle of *numerus clausus*, relevant also in the intellectual property context.

A. U.S. Copyright Law and the doctrine of (in-)divisibility

Although the U.S. system of copyright is commonly regarded as focused more on patrimonial interests in the exploitation of an intellectual work of art than on the protection of the moral prerogatives of the author⁹⁸, it is worth noticing that

⁹⁶ See explicitly, art. 5, n. 2 of the Berne Convention for the Protection of Literary and Artistic Works, pursuant to which “The enjoyment and the exercise of these rights shall not be subject to any formality”.

⁹⁷ On this point, Ricketson, S. & Ginsburg, J.C. *International Copyright and Neighbouring Rights. The Berne Convention and Beyond*. 2nd ed. vol I. Oxford: Oxford University Press, 2006, 322: “To some extent Berne’s twin principles of independence of protection and absence of formalities mirror national law developments away from a conception of copyright as a grant which the state, as a grantor, would freight with a variety of declaratory obligations (such as registration of the work with a public authority), toward an understanding of copyright as justified by the act of creation, rather than by an act of public recordation”.

⁹⁸ For an historic survey, Leaffer, M.A. *Understanding Copyright Law*. 5th ed. New Providence: Lexis Nexis, 2010, 3 ff.; and for a critical comparative approach, Ginsburg, J.C. “A Tale of Two Copyrights: Literary Property in Revolutionary France and America.” *Tul. Law Rev.* 64 (1990): 991.

until the reform of 1976, freedom of contract of right-holders was significantly restricted by the *Copyright Act* 1909, according to which,

“Copyright secured under this title or previous copyright laws of the United States may be assigned, granted, or mortgaged by an instrument in writing signed by the proprietor of the copyright, or may be bequeathed by will”⁹⁹.

Supported by this norm, the so called “doctrine of indivisibility” was developed, considering copyright as a “single incorporeal legal title or property”¹⁰⁰, or, in other words, a bundle of rights “incapable of being broken up into smaller rights and exercised by multiple owners”¹⁰¹. For what here matters, this doctrine can be examined as a rigorous application of the principle of *numerus clausus*: copyright could be assigned as a whole, but not be contractually fragmented into limited property rights¹⁰²; at the maximum, the owner could negotiate single faculties as mere obligational licenses, which gave the licensee no autonomous right to sue tortfeasors¹⁰³.

Originally, the rationale for this rule appeared clearly to be found in the reduction of transaction costs necessary to detect the specific individual with whom to contract, and, above all, in the aim to prevent third parties’ infringement of several property rights, so to protect alleged infringers from the harassment of multiple

⁹⁹ 17 U.S.C. § 42 (Copyright Act 1909), as re-numbered in 1947 under the heading “Assignments and bequests”.

¹⁰⁰ Henn, H.G. “Magazine Rights’ – A Division of Indivisible Copyright.” *Corn. Law Q.* 40 (1955): 411, 418

¹⁰¹ Leaffer, M.A. “Ownership and Transfers.” Joice, C. et al., *Copyright Law*. 8th ed. Newark: Lexis Nexis, 2010, 301.

¹⁰² According to the modular categorization proposed by Smith, H.E. “Exclusion versus Governance: Two Strategies for Delineating Property Rights.” *Journ. Leg. Stud.* 32 (2002): 453, we could qualify the system introduced by the original U.S. Copyright Law as an absolute (mandatory) exclusionary delineation-architecture regulating property interests over works of art.

¹⁰³ In the constant jurisprudence application, see *Goldwin Pictures Corp. v. Howells Sales Co.*, 282 Fed. 9 (II Circ. 1922); *M. Witmark & Sons v. Pastime Amusement Co.*, 292 Fed. 470 (E.D.S.C. 1924); *Hirschon v. United Artists Corp.*, in 243 F.2d (D.C. Circ. 1957), 640; among the latest *Brawley Inc. v. Gaffney*, 399 F. Supp. 115 (N.D. Cal. 1975).

successive law suits¹⁰⁴. On the other hand, while at the time of the first American Copyright Law (1790) the number of relevant faculties associated with the exclusive availability of the work of art was limited to the rights to publication and distribution (and there was consequently no practical interest to contract with subject different from the editor), the constant process of recognition of possible new economic uses of the intangible asset¹⁰⁵ determined the emergence of a critical attitude towards the doctrine, which was considered a strong (and always less acceptable) limit to the exploitation of the entire value of the author's intellectual work.

Moving from the acquired consciousness that “the author was hugely disadvantaged by his or her inability to retain separately value rights”¹⁰⁶ the American literature has significantly contributed to revision of the doctrine, which was formally abandoned with the copyright law reform of 1976¹⁰⁷. In particular, the present version of § 202, (d), n. 2, *Copyright Act* explicitly states that

“Any of the exclusive rights comprised in a copyright, including any subdivision of any of the rights specified by section 106, may be transferred [...] and owned separately. The owner of any particular exclusive right is entitled, to the extent of that right, to all of the protection and remedies accorded to the copyright owner by this title”¹⁰⁸.

¹⁰⁴ Natke, J.W. “Collapsing Copyright Divisibility: a Proposal for Situational or Medium Specific Indivisibility.” *supra* note 92, at 491 ff.

¹⁰⁵ See Copyright Act 1909, § 1, lett. (a)-(e); Patry, W.F. *Patry on Copyright*. St. Paul, Minn.: Thomson West, 2010, § 5:120, 5-250, indicates, among new recognized contents of copyright, the right to public performance (1856), to translate (1891) e to dramatize (1897) works.

¹⁰⁶ *Id.*, at § 5:120, 5-252.

¹⁰⁷ See Kaminstein, A.L. “Study No. 11. Divisibility of Copyrights.” Studies prepared for the Subcommittee on Patents, Trademarks, and Copyrights of The Committee on The Judiciary United States Senate, 86th Congress, II Sess., 1957, 1 ff.; Leaffer, M.A. “Ownership and Transfers.” *supra* note 101, at 302: “by ‘unbundling’ the bundle of rights, the 1976 Act has greatly encouraged the exploitation of copyright works”.

¹⁰⁸ According to the § 106, as recalled by the examined norm, “the owner of copyright under this title has the exclusive rights to do and to authorize any of the following: (1) to reproduce the copyrighted work in copies or phonorecords; (2) to prepare derivative works based upon the copyrighted work; (3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending; (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; (5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion

Looking at the position of exclusive licensees, it appears clear that they can now be considered as “owner”¹⁰⁹ of an absolute (property) right, autonomously conformed by individuals’ agreements. The contractual fragmentation of secondary intellectual property rights can thus be seen as a relevant factor, potentially connected to the general (and opposing) interests of certainty and transparency in the overall system of market relations.

These issues were specifically recognized by the same authors that supported the abrogation of copyright indivisibility, aware that “from the viewpoint of ease of tracing title and purposes of suit, it is much simpler to require that only the author or his assignee can control the copyright”¹¹⁰. Consequently, together with the widened operating margin of licenses, the reform integrated also those publicity mechanisms already known in American Copyright Law, developed with a cultural and economic background significantly different from that of the legal systems more directly influenced by the principles of the Berne Convention, and by its strong scepticism towards any formal fulfilment that could influence the scope of the author’s protection¹¹¹.

picture or other audiovisual work, to display the copyrighted work publicly; and (6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission”.

¹⁰⁹ See 17 U.S.C., § 101: “Copyright owner”, *with respect to any one of the exclusive rights comprised in a copyright*, refers to the *owner of that particular right*” (emphasis added). This approach to licenses is somehow comparable with the one detectable in the *Restatement (Third) of Property*, § 512 (2000), according to which “[t]he term ‘license’ as used in this Chapter, denotes an interest in land in the possession of another which: (a) *entitles the owner of the interest to a use of the land*, and (b) arises from the consent of the one whose interest in the land used is affected thereby, and (c) is not incident to an estate in the land, and (d) is not an easement” (emphasis added).

¹¹⁰ Kaminstein, A.L. “Study No. 11. Divisibility of Copyrights.” *supra* note 107, at 1.

¹¹¹ Not surprisingly, then, when U.S. joined the Berne Convention for the Protection of Literary and Artistic Works, several norms of the *Copyright Act* 1976, including those regarding constructive notice, had to be amended in order to respect international principles: see Leaffer, M.A. *Understanding Copyright Law*. *supra* note 98, at 9 ff., and more in general Ginsburg, J.C. & Kernochan, J.M. “One Hundred and Two Years Later: The United States Joins the Berne Convention.” *Colum. VLA Journ. Law & Arts*, 13 (1988): 1. On the value of publicity mechanisms as criteria meant to solve market-circulation and transparency problems, Nimmer, M.B. & Nimmer, D. *Nimmer on Copyright*. New York: Bender, 2009, § 10.07 [A], 10-56.13, focusing on the absence of a priority principle in copyright law, and concluding that “it may be presumed that the increased measure of certainty in commercial transactions that results from the recording of transfers was considered adequate reason to penalize a prior transferee as against certain subsequent transferees in those circumstances when the prior transferee fails to announce his rights”.

In this regard, it is worth emphasising, although in essential terms¹¹², that in 1834 the original discipline of the *Copyright Act* of 1790 had already been amended in order to introduce a prevision of registration of assignments, whose absence made them void as “against any subsequent purchaser or mortgagee for valuable consideration without notice”¹¹³. This publicity system was subsequently centralized at federal level through the Library of Congress¹¹⁴, and further applied in the *Copyright Act* 1909¹¹⁵. A deeper examination of these provisions shows that the non-fulfilment of registrations could not determine the complete invalidity of the assignment agreement and did not deprive the assignee of an autonomous standing to sue against any potential injurer¹¹⁶: what emerges, then, is a notice-mechanism whose function was to regulate potential conflict among subsequent purchasers of the copyright and more generally, to grant an organized and reliable system of market transactions.

These principles still stand in current federal Copyright law, reformed in order to adapt its prescription to the international mandatory regime of authors’ protection¹¹⁷: in more detail, while in the original framework of the *Copyright Act* 1976, the recordation of titles was an essential condition to fully enjoy copyright’s interest¹¹⁸, since 1989 this accomplishment has been exclusively connected with the discipline of “Constructive Notice” and above all the grant of “Priority between Conflicting Transfer”. Focusing on this last point and in detail, on the case of transfer of exclusive licenses, we must observe that, according to § 205, (d):

¹¹² For a detailed historic survey, see Patry, W.F. *Patry on Copyright*. *supra* note 105, at § 5:143, 5-322 ff.

¹¹³ Act of June 30, 1834, 23rd Cong., I Sess.

¹¹⁴ Act of July 8, 1870, 41st Cong., II Sess., § 89: “Copyrights shall be assignable in law, by any instrument of writing, and such assignment shall be recorded in the office of the Librarian of Congress within 60 days after its execution, in default of which it shall be void as against any subsequent purchaser or mortgagee for valuable consideration without notice”.

¹¹⁵ See 17 U.S.C. § 30 (Copyright Act 1909), renumbered in 1947, according to which “Every assignment of copyright shall be recorded in the copyright office within three calendar months after its execution in the United States or within six calendar months after its execution without the limits of the United States, in default of which it shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, whose assignment has been duly recorded”.

¹¹⁶ See *New Fiction Pub. Co. v. Star Co.*, 220 F. (S.D. N.Y. 1915), 994; and Nimmer, M.B. & Nimmer, D. *Nimmer on Copyright*. *supra* note 111, at § 10.07 [A][1][b], 10-56.16.

¹¹⁷ See 17 U.S.C., § 205 (Copyright Act 1967), (“Recordation of transfers and other documents”), as modified by the Act of Oct. 31, 1988 (100th Cong., II Sess.).

¹¹⁸ Leaffer, M.A. *Understanding Copyright Law*. *supra* note 98, at 219, and note 162.

“As between two conflicting transfers, the one executed first prevails if it is recorded, in the manner required to give constructive notice under subsection (c), within one month after its execution in the United States or within two months after its execution outside the United States, or at any time before recordation in such manner of the later transfer. Otherwise the later transfer prevails if recorded first in such manner, and if taken in good faith, for valuable consideration or on the basis of a binding promise to pay royalties, and without notice of the earlier transfer”¹¹⁹.

Looking at the operative aspects of the legislative discipline, although it is now possible for copyright owners to derive secondary rights from their original bundle, not all the licensed faculties are capable of assuming the basic features of a property right: in order to run with the asset and be indiscriminately binding for subsequent contrasting purchasers, any contractual transfer must be provided with constructive notice through the federal system of recordation¹²⁰. Otherwise, the licensed rights cannot stand against those subsequent conflicting licensees who have acquired their secondary rights in absence of notice and of any further element that would have induced a reasonable person to inquire about the presence of an earlier transfer¹²¹.

¹¹⁹ The § 205, (c), defines the condition of “Constructive notice”: “Recordation of a document in the Copyright Office gives all persons constructive notice of the facts stated in the recorded document, but only if – (1) the document, or material attached to it, specifically identifies the work to which it pertains so that, after the document is indexed by the Register of Copyrights, it would be revealed by a reasonable search under the title or registration number of the work; and (2) registration has been made for the work”.

¹²⁰ Patry, W.F. *Copyright Law and Practice*. Rockville: BNA Books, 1994, 398, highlights the importance of recordation citing *National Peregrine Inc. v. Capitol Savings & Loan Association of Denver* [116 Bankr. 194 (C.D. Cal. 1990)], in which a security agreement for a library of copyrighted films filed with the California Secretary of State but not with the Copyright Office was considered an unperfected security interest on the grounds that “federal [copyright] law preempts state methods of perfecting security interests in copyrights and related accounts receivable”. For a deeper analysis of a “recording of deeds” mechanism in a wider categorization of titling systems, see Arruñada, B. “Property Titling and Conveyancing.” *Research Handbook on the Economics of Property Law*. *supra* note 76, at 237.

¹²¹ For a deeper analysis of the notions of “notice” and “good faith” provided by § 205, (d), see Nimmer, M.B. & Nimmer, D. *Nimmer on Copyright*. *supra* note 111, at § 10.07 [A][2], 10-56.18 ff.; Patry, W.F. *Patry on Copyright*. *supra* note 105, at § 5:147, 5-328 f.

Examination of U.S. Federal Copyright Law, and in particular of its system of licensed rights, seems then to indicate that the need for certainty and transparency connected to the fragmentation of secondary property rights links the regulation of intellectual property agreements to the operational application of the principle of *numerus clausus*, supported by the theory of “verification costs”. More specifically, even in the system of intellectual property it seems possible to combine a dynamic evolution of secondary property rights present on the market with the general interest for transparency and coordination of individuals’ contractual activity: the balancing point is practically found in a system of public recordings meant to reduce the overall informational costs necessary to provide third parties with reliable notice of the exact content of their purchases¹²².

B. German Copyright Law: Urheberrecht and Nutzungsrechte

As hinted above, the German system of Copyright Law (*Urheberrechtsgesetz*, hereafter “UrhG”¹²³) presents several formal features that make it significantly different from that of North America, starting from the absolute absence of any publicity requirement even loosely connected to the author’s protection¹²⁴. The enjoyment and exercise of intellectual property rights is thus exclusively related to the act of creation, and this confirms the peculiar nature of Copyright, generally interpreted by the German doctrine according to a “monistic theory” that considers it as a unitary right encompassing both moral (*Urheberpersönlichkeitsrecht*, § 12 ff. UrhG) and economic (*Verwertungsrechte*, § 15 ff. UrhG) prerogatives¹²⁵.

¹²² See Section III.C.2.

¹²³ “Gesetz über die Wahrnehmung von Urheberrechten und verwandten Schutzrechten (*Urheberrechtswahrnehmungsgesetz*), 9. Sept. 1965”.

¹²⁴ For a basic comparative perspective, see Klett, A.R. Sonntag, M. & Wilske, S. *Intellectual Property Law in Germany. Protection, Enforcement and Dispute Resolution*. München: Beck, 2008, at 61: “[u]nder German copyright law there are no formal requirements for copyright protection. In particular, there is no registration requirement for either copyright protection or to facilitate copyright enforcement. There is not even a Copyright Office where work can be registered like in the U.S.”. The only exception is represented by the register for anonymous author disciplined by § 66 UrhG, organized at the Patent office (*Patentamt*).

¹²⁵ Among others, Ulmer, E. *Urheber- und Verlagsrecht*. 3rd ed. Berlin: Springer, 1980, 114; Rehbinder, M. *Urheberrecht*. *supra* note 89, at § 96, 45.

As a consequence, antithetically from the U.S. Federal system, copyright can not be assigned as a whole (§ 29, Abs. 1, UrhG)¹²⁶, but only licensed in the form of the so called *Nutzungsrechte*, i.e. rights to use the economic faculties associated with the forms of exploitation of intangible assets (the s.c. *Nutzungsarten*¹²⁷), that can be transferred to third parties in a bare or exclusive way (§ 31, Abs. 1, UrhG)¹²⁸.

In more detail, focusing on the exclusive license, *Nutzungsrechte* can be seen as secondary intellectual property rights, deriving *from* and (at the same time) insisting *on* the primary copyright, that share traditional features commonly associated with “real” rights¹²⁹. First of all, they are valid “against all the world”, being shielded through a system of property rules which gives the right-holder an autonomous standing to sue against any potential infringer (§ 97 ff. UrhG)¹³⁰. Secondly, these licensed rights are capable of running with the primary right in its circulation on the market, it being possible for the first licensee to prevail on contrasting rights subsequently conveyed by the owner to third parties, as explicitly recognized by the so called rule of *Sukzessionschutz* defined at § 33 UrhG¹³¹.

¹²⁶ See § 29.1 UrhG: “Das Urheberrecht ist nicht übertragbar, es sei denn, es wird in Erfüllung einer Verfügung von Todes wegen oder an Miterben im Wege der Erbaueinandersetzung übertragen”: on this norm, Berger, C. “Die Grundlagen des Urhebervertragsrechts.” *Urhebervertragsrecht*. Eds. Berger, C. & Wündisch, S. Baden-Baden: Nomos, 2008, § 39, 31.

¹²⁷ On the relationship between the concepts of *Nutzungsarten* (as the economic-technical notion that describes the available faculties of exploitation of a work of art) and *Nutzungsrecht* (as the property right that assures the legal transfer of those faculties to the licensee), see Schrickler, G. *Urheberrecht. Kommentar*. 3rd ed. München: Beck, 2006, § 31/38, 666.

¹²⁸ See § 31.1 UrhG, “Einräumung von Nutzungsrechten”: “Der Urheber kann einem anderen das Recht einräumen, das Werk auf einzelne oder alle Nutzungsarten zu nutzen (Nutzungsrecht) [...]”.

¹²⁹ In the German literature *Nutzungsrechte* are considered as real rights: according to different formal expressions, they can be regarded as “dingliche Rechte” [Wandtke, A.A. & Grunert, E.W. “§ 31/31.” *Praxiskommentar zum Urheberrecht*. 3rd ed. Eds. Wandtke, A.A. & Bullinger, W. München: Beck, 2009, 473)], and more frequently, “gegenständliche Rechte” (Berger, C. “Die Grundlagen des Urhebervertragsrechts.” *supra* note 126, at § 45, 32), or “quasidingliche Rechte” (Rehbinder, M. *Urheberrecht. supra* note 89, at § 560, 218).

¹³⁰ These rules are generally considered applicable only to exclusive licenses: see Götting, H.P. “Urheberrechtliche und vertragsrechtliche Grundlagen.” *Urhebervertragsrecht. Festgabe für Gerhard Schrickler zum 60. Geburtstag*. Eds. Beier, F.K. et al. München: Beck, 2005, 68.

¹³¹ According to which, “Ausschließliche und einfache Nutzungsrechte bleiben gegenüber später eingeräumten Nutzungsrechten wirksam. Gleiches gilt, wenn der Inhaber des Rechts, der das Nutzungsrecht eingeräumt hat, wechselt oder wenn er auf sein Recht verzichtet”. On the value of this norm, see Gottzmann, S. *Sukzessionschutz im Gewerblichen Rechtsschutz und Urheberrecht. supra* note 87, at 11 ff.; and Schulze, G. “§ 33/2.” *Urheberrechtsgesetz Kommentar*. 2nd ed. Eds. Dreier, T. & Schulze, G. München: Beck, 2006, 560.

For what here matters, it is extremely important to underline that under § 31, Abs. 1, UrhG these secondary “property” rights can be contractually tailored under the three traditional dimensions of content, time and space, thus creating a potentially indefinite number of so called *Beschränkte Nutzungsrechte* (i.e. “limited rights of enjoyment”)¹³² that appear determinant to support the dominant idea of a complete abandonment of the doctrine of *numerus clausus* in the field of intellectual property¹³³.

As a consequence, one might reasonably think that when dealing with rights over intangible assets (*Immaterialgüterrechte*) there would be no limit in the contractual freedom to conform and fragment the content of property transactions. Applied in the specific branch of copyright law, deprived of any form of publicity mechanism, this conclusion would imply the complete irrelevance not only of the “organizational” role generally associated with the doctrine, but also of its “informational” regulatory issues: secondary property rights insisting on intangible assets could circulate on the market and stand against their subsequent acquirers even in the absence of any possible means of notice, with a potential reduction of the overall transparency and reliability of market negotiations¹³⁴.

¹³² See § 31.1 UrhG: “[...] Das Nutzungsrecht kann als einfaches oder ausschließliches Recht sowie räumlich, zeitlich oder inhaltlich beschränkt eingeräumt werden”.

¹³³ See Section IV.B, and Berger, C. *Rechtsgeschäftliche Verfügungsbeschränkungen*. Tübingen: Mohr Siebeck, 1998, 347 f.; Schricker, G. *Urheberrecht. Kommentar*. *supra* note 127, at § 28 ff./52, 596.

¹³⁴ Recently, on these issues, Koziol, G. *Lizenzen als Kreditsicherheiten*. Tübingen: Mohr Siebeck, 2011, 73: “[d]er Rechtsverkehr und Dritte sind bei Begründung und Übertragung absoluter Rechte in jedem Fall schutzbedürftig, ganz gleich, ob es sich um körperliche Sachen oder immaterielle Güter handelt. Denn absolute Rechte berühren durch ihre Wirkung gegenüber jedermann zwangsläufig die Interessen Dritter. Aufgrund der Natur der Immaterialgüterrechte ist hier sogar noch ein höheres Verkehrsschutzbedürfnis gegeben, da Rechte mangels körperliche Sachherrschaft ohnehin schwerer erkennbar sind”; see also, Marshall, H. “Grenzen der Aufspaltbarkeit von Nutzungsrechten unter dem Gesichtspunkt der fortschreitenden wirtschaftlichen, technischen und politischen Entwicklung.” *Urheberrechtliche Probleme der Gegenwart. Festschrift für Ernst Reichardt zum 70. Geburtstag*. Eds. Scheuermann, A. & Strittmatter, A. Baden-Baden: Nomos, 1990, 125; Berger, C. “Die Grundlagen des Urhebervertragsrechts.” *supra* note 126, at § 149, 66, and Loewenheim, U. & Nordermann, J.B. “Beschränkte Einräumung von Nutzungsgerechten.” *Handbuch des Urheberrechts*. 2nd ed. Ed. Loewenheim, U. München: Beck, 2010, § 27/2, 418: “[d]em prinzipiellen Interesse der Vertragsparteien, bei der Beschränkung von Nutzungsrechten möglichst freie Hand zu haben, steht angesichts der dinglichen, gegenüber jedermann bestehenden Wirkung der beschränkter Nutzungsrechte das Interesse der Allgemeint gegenüber, es im Rechtsverkehr mit *klaren und überschaubaren Rechtsverhältnissen* zu tun haben” (emphasis added).

Not surprisingly, then, a deeper analysis of the copyright normative framework shows significantly different operative rules. In particular, it is worth observing that in addition to the license of secondary property rights in the form of *Nutzungsrechte*, it is always possible for the right-holder to grant a specific right to use the intellectual property on merely obligational grounds, defining legal positions relevant only between the contracting parties¹³⁵, and which, as a consequence, cannot run with the primary right according to the rule of § 33 UhrG¹³⁶.

In this regard, the fundamental parameter used by German Courts to interpret licensing agreements, in order to understand if they can grant a secondary *property* right or a mere *relative* one, is inextricably connected to the specific structure of the economic faculties that have been negotiated. This point appears clear in German jurisprudence: contractual agreements can be recognized as “*Nutzungsrechte*” only when the exclusive faculties that they subtract from the primary bundle meet a socially relevant property interest, easily measurable and understandable in the market relation as autonomous and independent faculties, both in economic and technical terms¹³⁷. As a consequence, mere idiosyncratic faculties, which do not mirror interests commonly felt as relevant in market transactions, can be enforced only *vis-à-vis* the contracting parties, and not as secondary *property* rights on the work

¹³⁵ Loewenheim, U. & Nordermann, J.B. “Das System des Nutzungsrechte.” *Handbuch des Urheberrechts*. *supra* note 134, § 27/2, 418: “Die schuldrechtlichen Gastattung hat allerdings den Nachteil, dass die Entstehung einer Dritten gegenüber wirkenden Rechtsposition und auch eine weitere Übertragung der Nutzungsrechte auf Dritte ausscheidet”.

¹³⁶ Schrickler, G. *Urheberrecht. Kommentar*. *supra* note 127, at § 33/17, 735: “Der Sukzessionsschutz nach § 33 greift nur zugunsten gegenständlicher Nutzungsrechte ein, nicht auch zum Schutz rein schuldrechtlicher Befugnisse”.

¹³⁷ Literally, BGH, 13th October 2004 - *Man spricht deutsch*, *GRUR Int.* 54 (2005): 148: “Nutzungsrechte können zwar räumlich, zeitlich oder inhaltlich beschränkt eingeräumt werden (§ 32 UrhG a.F., § 31 Abs. 1 Satz 2 UrhG n.F.). Eine nicht nur schuldrechtlich, sondern dinglich wirkende Aufspaltung eines Nutzungsrechts ist aber nur möglich, wenn es sich um übliche, technisch und wirtschaftlich eigenständige und damit klar abgrenzbare Nutzungsformen handelt”; and in the same sense, BGH, 24th October 2002 - *CPU-Klausel*, *GRUR* 105 (2003): 416; BGH, 6th July 2000 - *OEM-Version*, *GRUR* 103 (2001): 153; for further references, Schrickler, G. & Loewenheim, U. *Urheberrecht. Kommentar*. 4th ed. München: Beck, 2010, § 28/87, 591 f.

of art, that would otherwise impose high inquiry costs for third parties in order to detect the effective extent of the rights negotiated¹³⁸.

In broader terms, it seems then relevant to notice that individuals' autonomy in licensing secondary intellectual property rights is not completely free, as the irrelevance of *numerus clausus* would at first induce us to conclude: on the contrary, right-holders can tailor the content of the *Nutzungsrechte* allocated to third parties only according to the substantial economic faculties that, given the commercial and industrial development of the market context, represent the technical boundaries of the available forms of exploitation of works of art¹³⁹.

Irrespective of the declamatory principle traditionally alleged, it seems then coherent to conclude that the operational rules detectable in German jurisprudence and doctrine significantly mirror the evolutionary interpretation of *numerus clausus*, supported by the "optimal standardization theory", recognizing the regulatory role associated with the principle in the the coordination of individuals' activity, even in the field of intellectual property. Moving from the "informational" role associated with the doctrine, it is in fact possible to apply it in order to enforce as property rights only those contractual schemes of exploitation of knowledge-based resources that, from time to time, match well defined forms of exploitation of intangible assets, meeting stable and socially typical interests. In better terms, as specified by authoritative legal scholars, a property entitlement will thus be recognized only when,

¹³⁸ Wandtke, A.A. & Grunert, E.W. "§ 31/28." *Praxiskommentar zum Urheberrecht*. *supra* note 129, 476; Pahlow, L. *Lizenz und Lizenzvertrag im Recht des Geistigen Eigentums*. Tübingen: Mohr Siebeck, 2006, 200.

¹³⁹ Clearly, the development of the market context, and the connected available technical faculties of exploitation of works of art, has been recently influenced by the evolution of the digital, on-line environment. Significantly in this regard, in April 2010, in the controversial case *MyVideo*, the Munich *Oberlandesgericht* [OLG München, 29th April 2010, ZUM 54 (2010): 709] has confirmed a first grade sentence [LG München, 25th June 2009, ZUM 53 (2009): 788] stating that the upload of copyrighted materials on an Internet server in order to make them accessible to the public (according to the right defined at § 19a UrhG – *Recht der öffentlichen Zugänglichmachung*) necessarily implies their initial reproduction (embraced in the content of § 16 UrhG – *Vervielfältigungsrecht*), so that this latter faculty cannot be autonomously licensed by the right-holder (in the particular case, the collecting society GEMA), but only within the broader context of the rights of on-line exploitation. For a deeper analysis of the case, also focused on the limit imposed by this line of reasoning on the licensor's contractual autonomy: Ullrich, J.N. "Alles in einem – Die Einräumung eines Nutzungsrechts i. S. d. § 31 Abs. 1 UrhG für einen On-Demand-Dienst im Internet." ZUM 54 (2010): 311, 314; and in critical terms, Jani, O. "Alles eins? – Das Verhältnis des Rechts der öffentlichen Zugänglichmachung zum Vervielfältigungsrecht." ZUM 53 (2009): 722, 725.

from case to case, the benefits deriving from the contractual fragmentation of the licensed rights and the connected intensive exploitation of the authors' bundle can compensate the measurement cost imposed on the overall system of commercial relations¹⁴⁰.

VI. CONCLUSIONS

As emphasized above all by European legal scholars, when dealing with private interests over intangible assets it is certainly improper to uncritically apply every principle that has been developed and traditionally interpreted in connection with the use and transfer of corporeal things¹⁴¹. On the contrary, when it is possible to detect common rationales and operational rules supporting the application of a property-type mechanism, a doctrine originating in the classic Law of Property can be interpreted as a coherent framework even for the allocation and exploitation of exclusive faculties over informational resources¹⁴².

This seems to be the case with the principle of *numerus clausus*, here examined in its bilateral interrelation with the process of contractual fragmentation of primary

¹⁴⁰ Explicitly, Schricker, G. *Urheberrecht. Kommentar.* *supra* note 127, at § 28 ff./52, 596: “[d]er Aufspaltbarkeit der urheberrechtlichen Verwertungsbefugnisse in gegenständliche Nutzungsrechte werden von der herrschenden Meinung deshalb Grenzen gezogen, die von Fall zu Fall unter Berücksichtigung einerseits des Interesses des Urhebers an einer optimal differenzierten und intensiven Verwertung, andererseits des Verkehrsschutzinteresses der Allgemeinheit bestimmt werden müssen”. This conclusion is significantly comparable with the ones drawn, under a legal and economic approach, by Merrill, T.W. & Smith, H.E. “Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle.” *supra* note 36, at 40 (“the *numerus clausus* strikes a rough balance between the extremes of complete regimentation and complete freedom of customization, and thus leads to a system of property rights that is closer to being optimal than that which would be produced by either of the extreme positions”); and by Hansmann, H. & Santilli, M. “Authors’ and Artists’ Moral Rights: a Comparative Legal and Economic Analysis.” *supra* note 74, at 101, (“the few special cases in which the law permits the enforcement of servitudes on chattels – such as security interests in personal property or resale price maintenance – arguably involve circumstances in which (1) unrestricted use of the burdened chattel by subsequent purchasers threatens substantial harm to the person enjoying the benefit of the servitude, (2) *subsequent purchasers can easily be put on notice of the servitude*, and (3) it is not too difficult for subsequent purchasers to obtain release from the servitude where appropriate”), (emphasis added).

¹⁴¹ See, as a general reference, Pahlow, L. *Lizenz und Lizenzvertrag im Recht des Geistigen Eigentums.* *supra* note 138, at 199.

¹⁴² Among others, Gambaro, A. *Il diritto di proprietà.* *supra* note 1, at 208, note 54; Jänich, V. *Geistiges Eigentum – eine Komplementärerscheinung zum Sacheigentum?.* *supra* note 22, at 185 ff.; and for a peculiar approach in the common law debate, Newman, C.F. “Transformation in Property and Copyright.” *Vill. Law Rev.* 56 (2011): 251.

intellectual property rights. From the preceding analysis, it seems now possible to draw some conclusions.

From a traditional perspective, *numerus clausus* still maintains the same mandatory content that it had at the time of the French Revolution, when it inspired a model of property law that abolished the feudal regime – with its multiplication of rights over things (*e.g.* land) – and fostered the free exploitation and marketability of resources for the Owner. From this perspective, ownership is the primary and absolute right, and its fragmentation is confined in a closed set of exceptions that only Legislators can alter, thus preventing the rise of those efficiency problems in the interpersonal allocation of property rights that in the legal and economic literature are discussed by the theorists of the “tragedy of anticommons”¹⁴³. The analysis of the principle through the lens of intellectual property rights helps to challenge the idea that *numerus clausus* can effectively face this kind of issues: not just because they may be not relevant in practice (even in the field of intellectual property), but because they are not substantially influenced by the application of a principle that limits only the number of *types* of property rights that can be recognized at law, and not the concrete number of exclusive faculties that can insist on a single resource.

Once this rigid “organizational” perspective has been abandoned, *numerus clausus* can be interpreted in a more dynamic way, supporting an evolutionary process of fragmentation of exclusive faculties over economic resources in which contractual freedom to tailor individuals’ property transactions is constantly balanced with the general interest for certainty, reliability and transparency in the overall market structure. This “informational” approach is fundamental for explaining the unitary regulatory function that the principle may provide throughout the legal system.

In the field of property law over tangible assets, it offers a solid conceptual framework for rationalising the constant emergence of new kinds of real rights, different from the ones explicitly codified or formally recognized by the Law, with a process that is evident both in civil law and in common law systems, and that has

¹⁴³ See on this parallelism Baffi, E. “The Anticommons and the problem of *numerus clausus* of property rights.” *Working Paper, Università degli Studi Roma Tre* (2007), available at www.ssrn.com.

been recently justified in comparative perspective emphasising that a too rigid approach to the doctrine would completely prevent innovation in the possible enforcement of atypical, although socially relevant, property interests¹⁴⁴.

Applied to intellectual property, this functional interpretation of the doctrine of *numerus clausus* helps to detect the operational rules that concretely define the scope of the possible content of licensing agreement, demonstrating that issues of clarity and coherent coordination among individuals' contractual autonomy are present also in this field, notwithstanding the general "public good" character of knowledge-based resources. This means that, although not often explicitly recognized, legal systems have always to define the regulatory framework in which freedom of contract is capable of tailoring secondary intellectual property rights, as rights relevant *erga omnes* and running with the intangible assets from which they derive. In more detail, the example of two formally different systems of copyright law, that of Germany and of the Federal U.S., has demonstrated that the operative measures through which this common policy goal can be achieved may significantly mirror the patterns suggested by the literature that has questioned the principle of *numerus clausus* under an efficiency perspective: optimal standardization of socially desirable property interests *vs.* control of the costs of notice-mechanisms necessary for the verification of the exact extent of the rights circulating on the market.

¹⁴⁴ See in the European context, Morello, U. "Tipicità e numero chiuso dei diritti reali." *supra* note 64, at 154 ff.; Akkermans, B. *The Principle of Numerus Clausus in European Property Law.* *supra* note 2, at 397 ff.; van Erp, S. "A *Numerus Quasi-Clausus* of Property Rights as a Constitutive Element of a Future European Property Law." *supra* note 2, at 8 ff.; in the common law system is still relevant the image suggested by Rose, C.M. "Crystals and Mud in Property Law." *Stan. Law Rev.* 40 (1988): 577, as more recently cited by Davidson, N.M. "Standardization and Pluralism in Property Law." *supra* note 61, at 1617: "The law of property often begins with clear rules; courts introduce flexibility (historically as a matter of equity), which private parties then try to contract around to provide clarity, leading to more judicial fuzziness. The *numerus clausus* reflects this dynamic. One might think the *numerus clausus* to be situated firmly in the realm of crystalline rules – as most efficiency-oriented accounts would suggest. But the dynamism evident in the standard forms is in many ways a constant process of 'muddying', as competing goals play out in the composition of the list and in the content of the forms themselves. Eventually, a given form tends to achieve something like crystal status, but that stasis is generally temporary; it is only a question of time before the process continues".