

Digital Revolution – New Challenges for Law

Data Protection, Artificial Intelligence,
Smart Products, Blockchain Technology
and Virtual Currencies

edited by

Alberto De Franceschi
Reiner Schulze

co-edited by

Michele Graziadei
Oreste Pollicino
Federica Riente
Salvatore Sica
Pietro Sirena

2019



Nomos

Published by

Verlag C. H. Beck oHG, Wilhelmstraße 9, 80801 München, Germany,
eMail: bestellung@beck.de

and

Nomos Verlagsgesellschaft mbH & Co. KG Waldseestraße 3–5, 76530 Baden-Baden, Germany,
eMail: nomos@nomos.de

Recommended citation:

[Author], in: De Franceschi/Schulze,
Digital Revolution - New Challenges for Law, 2019,
p. [#], mn. [#]

ISBN 978 3 406 74387 0 (C.H.BECK)

ISBN 978 3 8487 6194 4 (NOMOS)

© 2019 Verlag C.H.Beck oHG

Wilhelmstr. 9, 80801 München

Printed in Germany by

Kösel GmbH & Co. KG

Am Buchweg 1, 87452 Altusried-Krugzell

Typeset by

Reemers Publishing Services GmbH, Krefeld

Cover: Druckerei C.H.Beck Nördlingen

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission of Verlag C. H. Beck, or as expressly permitted by law under the terms agreed with the appropriate reprographic rights organisation.

Enquiries concerning reproduction which may not be covered by the above should be addressed to C. H. Beck at the address above.

Preface

The European Law Institute (ELI), founded in 2011 as an entirely independent organisation, aims to improve the quality of European law and to contribute to the formation of a more vigorous European legal community. It seeks to provide a forum, for discussion and cooperation, of jurists irrespective of their vocation or occupation, inter alia academics, judges, lawyers and other legal professionals from all over Europe and beyond, who take an active interest in European legal development. In its project work, the ELI seeks to initiate, conduct and facilitate research, to make recommendations, and to provide practical guidance in the field of European legal development. This often involves the exploration of yet uncharted legal territories, such as the many legal issues raised by new digital technologies.

While the ELI as such covers all areas of the law, it was decided in 2015 to also establish Special Interest Groups (SIGs), which are topic-specific working groups established for ELI Members to facilitate discussion, share and monitor legal developments, and stimulate project proposals. As such, they are of fundamental importance to the ELI's success, being the breeding ground for fresh ideas and new ELI projects and allowing ELI Members and experts outside the ELI as well as stakeholders, including EU institutions, to engage in an intensive discussion in a particular focus area.

Given the potential of digitalisation to completely change the way our societies and economies function and given the need to submit every part of our law to a 'digital fitness check', the ELI's Digital Law SIG was among the first SIGs to be established. With Alberto De Franceschi and Reiner Schulze as Chairs, the ELI Digital Law SIG has since 2015 been at the forefront of legal discussion on digital issues in Europe. This discussion has often revealed a need to review, and sometimes to completely rethink, important parts of our law, and several ELI projects on topics related to the challenges of digitalisation launched in recent years have originated from the work of the ELI Digital Law SIG.

The ELI is extremely grateful to the Chairs of the ELI Digital Law SIG for having also organised, together with a group of colleagues, a conference that took place in Mogliano Veneto, Italy, on 19 and 20 April 2018. The papers that were given at that conference are published in this volume. The conference was a landmark event, encouraging Europe's 'digital legal community', including a number of representatives from EU institutions and national governments which convened at Villa Braidà, to discuss in depth current issues and the challenges posed by the digital revolution and which legislators, courts and academics may need to address. Some of the papers given and discussions held at Villa Braidà have already triggered further developments at European and national level.

On behalf of the ELI, I would like to warmly thank Alberto De Franceschi, Reiner Schulze as well as Christoph Busch that took over as Chair from Schulze in spring 2018, for their commitment as ELI SIG Chairs and to congratulate them on this great success.

Vienna, July 2019

Christiane Wendehorst, ELI President

Table of Contents

Preface.....	V
List of Authors	XV

Part 1 New Challenges and Perspectives

A. Digital Revolution – New Challenges for Law: Introduction (<i>De Franceschi/Schulze</i>).....	1
I. The starting points	1
II. Trade in data and data rights	2
1. “Free flow of data” and individual data rights	2
2. Consumer protection.....	4
III. The rise of the Platform economy: Disruption and Regulatory challenges	5
IV. Artificial intelligence: Opportunities and Risks.....	9
1. Technological innovation and self-regulation	9
2. Artificial Intelligence and the “personalisation” of Legal Norms	10
3. Liability for Artificial Intelligence	10
a) New risks	10
b) Product liability	11
c) Operator’s liability	12
V. Between conceptual disruption and coherency	13
1. Conceptual disruption.....	13
2. New interferences.....	14
3. Approaching coherency?	15
B. Personal autonomy and the digital revolution (<i>Graziadei</i>).....	16

Part 2 Digital Economy and the Disruption of Traditional Concepts

C. Legal Challenges of the Changing Role of Personal and Non-Personal Data in the Data Economy (<i>Drexl</i>)	19
I. Introduction	19
II. Towards a new regulatory theory for the digital economy.....	21
1. The basic concept.....	21
2. The four objectives and their interactions.....	23
a) Guaranteeing functioning and competitive markets	23
b) Enhancing innovation.....	24
c) Consumer protection, and data protection in particular.....	25
d) Public interest grounds, including freedom of information and free flow of information	29
III. Why data subjects should not ‘own’ their personal data	31
1. Existing proposals in favour of a data ownership right in personal data	31
2. The fundamental rights dimension.....	34
3. Data ownership in personal data in conflict with data protection rules.....	35
IV. Provision of personal data as a contractual counter-performance	36
V. Data portability and access rights for non-personal data	38
VI. Conclusion.....	40
D. The ALI-ELI Principles for a Data Economy (<i>Wendehorst</i>)	42
I. About the Project.....	42
1. History	42
2. Overall objectives.....	43
3. Addressees.....	43
II. Legal challenges posed by data-driven economies	43
1. Data-driven economies	43
2. Legal challenges	44

Table of Contents

a) Absence of fit of traditional legal concepts and categories	44
b) Data protection and fundamental rights	44
c) Overlap with consumer law	45
III. Preliminary Draft No. 2	45
1. Purpose, scope, and definitions	45
2. Data transactions	46
a) Contract typology	46
b) Main types of transactions identified by Preliminary Draft No. 2	47
c) The next steps to be taken	48
3. Restrictions on Free Control and Processing	48
a) Wrongfulness of control or processing	49
b) Data ownership	49
c) Contractual protection	50
d) Aggregated and derived data	50
4. Rights with regard to co-generated data	51
a) Specific data rights vis-à-vis a controller	51
b) The concept of co-generated data	52
c) Access to and porting of co-generated data	52
d) Desistance from control or processing of co-generated data	55
e) Correction of co-generated data	55
5. Chapters VI to VIII	56
IV. Conclusions	56
E. Towards Fairness and Transparency in the Platform Economy? A First Look at the P2B Regulation (Busch).....	
I. Introduction	57
II. The Platform Economy and its Discontents	58
1. The Rise of the Platform Economy	58
2. Beyond Antitrust: Fairness and Transparency	59
III. The P2B Regulation: A First Assessment	60
1. Scope	60
2. Terms and Conditions	61
a) A Fairness Test for P2B Contracts?	61
b) General Transparency Requirements	62
c) Specific Contractual Terms	63
3. Change of Terms and Conditions	63
4. Restriction, Suspension and Termination	64
a) Transparency Requirements	64
b) Procedural Requirements	64
5. Transparency of Rankings	66
6. Dual Role of Platform Operators	68
a) Marketplaces as Learning Tools	68
b) Differentiated Treatment	69
c) Ancillary Goods and Services	69
7. Data Access	69
a) Transparency vs. Access Rights	70
b) Portability of Reputation Data	71
8. Parity Clauses	72
9. Complaint-handling and Mediation	73
10. Collective Enforcement	73
IV. Summary and Outlook	74
Part 3	
The Processing of Personal Data	
F. Consent for the Processing of Personal Data and its Relationship to Contract (Schmidt-Kessel)	
I. Consent in the GDPR	75
1. General prerequisites	76
2. Restrictions to consent	76
3. The so-called bundling prohibition	76
II. Consent and Contract	77
1. Separation of contract and consent (<i>Trennungsprinzip</i>)	77

Table of Contents

2. Consequence: consent capable of being object of an obligation	78
III. Consent and (quasi) proprietary Positions.....	79
1. Close to an absolute right.....	79
2. Consent fulfils (some) functions of a disposition (<i>Verfügung</i>).....	79
IV. Consent and Transfer by Contract?	80
1. General approaches to contract and transfer of property rights.....	80
2. Contract and consent – abstraction principle?.....	81
3. Change by the Directive 770/2019 on the supply of digital content?	82
V. Conclusions.....	82
G. The Data Protection Officer (“DPO”) (<i>Fauvarque-Cosson</i>)	84
H. Digital Inheritance (<i>Resta</i>).....	88
I. Digital inheritance as a legal issue.....	88
II. The data protection perspective	90
III. The succession law framework.....	92
IV. Governance by contract	95
Part 4	
Big Data, Artificial Intelligence and the Liability for Processing Personal Data	
J. Individual Human Autonomy: The Rule of Law v. the Rules of Smart Technologies and their Inherent Manipulations (<i>Graf von Westphalen</i>)	99
I. Some Reflections from the Inside.....	99
1. The Experts.....	99
a) Jaron Lanier.....	99
b) Yvonne Hofstetter.....	101
2. The Professional Gate Keepers.....	102
3. The Philosophers.....	103
a) Richard David Precht.....	103
b) Yuval Noah Harari	104
4. New Ways of Thinking and Its Consequences	105
a) Andreas Rödder.....	106
b) Daniel Suarez et al.	106
5. Short Interim Summary.....	108
II. The Regime of Algorithms v. the Rule of Law	108
1. The Basic Difference Between Legal Rules and Algorithms as Technical Norms	108
a) Legal Rules.....	108
b) Algorithms.....	109
c) Preliminary Conclusions	110
2. The Special Extra-Territorial Aspect of BIG DATA.....	110
3. Formal Consent – No Sufficient Protection for the Consumer	111
3. Preliminary Summary	112
IV. Possible Ways Out – But Scepticism Prevails.....	113
1. Digital Charta on European Human Rights	113
2. Further Protection Shields?.....	113
V. Summary.....	114
K. Information “Truth” and Digital Solidarity (<i>Sica/Giannone Codiglione</i>)	116
I. Internet, Computer Freedom and Digital Solidarity.....	116
II. Social Media: Virtual Communities or Social Engineering Systems?.....	119
III. The Information Market and Incentive Effects: The Case of Hate Speech.	120
IV. The External Factor: Web Disinformation and the News Revolution on Social Media.....	122
V. Judicial Remedies and the Limits of the Law.....	124
VI. The Problem of the Legal Definition and the Role of Internet Providers: From Neutrality to Accountability?.....	126
VII. The EU Strategy to Tackle Illegal Content Online an the new German Law on the Enforcement of Rights in Social Media.....	130
VIII. Truth and Digital Solidarity in the Future of Internet Law: What Remedies, what Values, what Guarantor? Starting Points for a Holistic Approach	135
L. Certification mechanisms and liability rules under the GDPR. When the harmonisation becomes unification (<i>Riccio/Pezza</i>).....	140
I. Introduction.....	140

Table of Contents

II. Certification mechanism. An overview	141
III. Article 82 GDPR: liability rules for data processing. Key differences with Directive 95/46	142
IV. Potential issues. The notion of EU tort law: does it even exist?.....	144
1. The nature of liability: identifying the relevant criteria	144
2. The notion of recoverable damages	145
V. When it comes to practice. A country by country analysis.....	146
1. Reference to national legislation. The Italian and the German models	146
2. The court based approach – UK Data Protection Act	148
3. The importance of the national context. The French approach	149
VI. Shaping a solution. The role of certifications	149
VII. Conclusions and final remarks	151
M. The Right to Compensation for Breach of Data Protection Provisions in the EU Context (<i>Riente</i>).....	152
I. Introduction	152
II. The EU General Context	153
1. Scope of application of Article 82 GDPR	156
2. The liability regime under Article 82 GDPR	157
a) The controller	158
b) The controller liability exemption.....	159
c) The processor.....	159
d) The processor liability exemption	161
III. The Italian Scenario	161
1. The liability regime under the Italian Data Protection Code prior to the implementation of GDPR into national law	162
a) Burden of proof under Article 15 of the Italian Data Protection Code.....	162
b) The quantification of non-material damages	163
2. The liability regime under the Italian Data Protection Code after the implementation of GDPR into national law	163
a) Burden of proof under the contractual liability regime.....	164
b) Burden of proof under the non-contractual liability regime	165
IV. Conclusion.....	166
Part 5 Liability for Digital Products	
N. Risk Allocation and Liability Regimes in the IoT (<i>Mezzanotte</i>).....	169
I. Introduction	169
II. The Field of Analysis: IoT and Connected Risks of Harm.....	170
III. The Regulatory Context and the Available Liability Regimes.....	172
1. The Inadequacy of General Liability Remedies.....	174
2. Liability in the IoT Landscape: Product Liability as a Viable Source of Inspiration	175
IV. Product Liability and Relevant Risks of Harm in the IoT	176
1. Liable Persons	177
2. The Notion of Product.....	178
3. The Notion of Defectiveness	179
4. The Scope of Recoverable Losses.....	180
5. Data Breach: the GDPR Liability Regime.....	182
V. Proof of Causation in the IoT Multi-layered Environment.....	185
VI. Conclusions	188
O. Autonomous Vehicles' Liability: Need for Change? (<i>Patti</i>).....	190
I. Introduction	190
II. A Fitness Check on EU and National Law Governing Liability	191
III. The Current Legal Framework	193
1. Substantive Liability Rules.....	193
2. Compulsory Insurance	195
3. Product Liability	197
IV. What Stays and What Fades Away?	198
1. From the Keeper to the Manufacturer	198
2. The Near Future: A Virtuous Competition between New and Old	200
3. A More Distant Future: Only Autonomous Vehicles on the Roads.....	201

Table of Contents

V. The Slow Metamorphosis of the Product Liability Regime.....	203
1. An Ancient Piece of Legislation.....	203
2. Some Issues to be Resolved.....	204
a) Eliminating the Development Risk Defence.....	204
b) Discovering a Defect in the Design.....	205
c) A Duty to ‘observe’ the Product.....	208
d) The dilemma situations.....	209
e) The Proof of Causation.....	211
3. A Different Product Liability or a New Paradigm of Traffic Liability?.....	212
4. Conclusion.....	213
P. Protecting the Values of Consumer Law in the Digital Economy: The case of 3D-printing <i>(Howells/Twigg-Flesner/Willett)</i>	214
I. Introduction.....	214
1. Core Questions and Answers.....	214
2. Jurisdictional focus and significance.....	215
3. Structure.....	215
4. Digital disruption and 3D-printing.....	215
5. Key questions.....	217
6. Filling key research gaps-a new way of responding to innovation.....	219
II. Consumer Law Values and Digital Innovation.....	220
1. The need ethic.....	220
2. Innovation and the continuing importance of the need ethic.....	223
III. 3D Printing and the Law.....	226
1. 3D printing used in commercial production of goods.....	227
2. Liability of professionals converting a CAD-file into a finished product.....	229
3. Liability for CAD file.....	232
4. The boundary between “hobbyists” and “professionals”.....	235
5. Radical deviation from doctrinal tradition: Network Liability.....	239
IV. Concluding Comments: consumer law values, 3D-printing and the wider digital revolution...	242

Part 6

The Approach of the European Commission on Artificial Intelligence

Q. A system of governance for Artificial Intelligence through the lens of emerging intersections between AI and EU law <i>(Mazzini)</i>	245
I. Introduction.....	245
II. Product safety.....	249
1. The risk of tension between EU product safety law and AI.....	250
a) AI safety.....	252
b) The inherent relationship between safety and risk.....	254
III. Product liability.....	258
1. The concept of defect.....	259
2. Burden of proof.....	263
3. Later defect defense.....	265
IV. Consumer protection.....	266
1. Average consumer.....	268
2. Information duties.....	271
3. Contractual fairness.....	274
V. Protection of personal data.....	276
1. Automated individual decision making, including profiling.....	280
a) The applicability of GDPR to uses and applications of AI generating insights, inferences and predictions.....	280
aa) The meaning of “identification” in GDPR.....	281
bb) The legal status of the knowledge generated by AI systems.....	283
b) Decisions based solely on automated processing.....	285
c) Decisions that produce legal effects or similarly significantly affect the data subject.....	286
d) Necessity of processing for the purposes of entering into, or performance of, a contract.....	287
e) Explicit consent.....	289
f) Right of explanation.....	291
VI. Conclusions.....	296

Table of Contents

Part 7

Blockchain Technology, Smart Contracts and Virtual Currencies

R. Smart Contracts: Do we need New Legal Rules? (Weber)	299
I. Introduction	299
1. Blockchain Technology as New Infrastructure	299
2. Suitability of Blockchain for Execution of Transactions	300
II. Notion and Characteristics of Smart Contracts	301
1. Notion	301
2. Characteristics	302
3. Practical Examples	303
III. Contract Formation	304
1. Challenges of Automated Contracting	304
2. Specific Problem of General Business Conditions	305
3. Challenges for the Viability of Legal Contracts	306
4. Need for New Legal Rules in Contract Formation?	307
IV. Performance of Smart Contracts	308
1. Application of Traditional Rules	308
2. Potential Performance Failures	309
a) Technological Failures	309
b) Program Failures	310
3. Digital Execution and Enforcement	310
a) Transfer Challenges	310
b) Enforcement: Dispute Resolution	311
4. Need for New Legal Rules in Contract Performance?	311
V. Outlook	312
S. Legal Boundaries of Blockchain Technologies: Smart Contracts as Self-Help? (Möslein)	313
I. The Emergence of Technology-Based Rules	313
1. Smart Contracts as Regulatory Devices	313
2. Blockchain Technology as a Regulatory Infrastructure	315
3. Conflicts of Legal and Technology-Based Rules	316
II. The Double Duality of Legal Boundaries	317
1. Recognition and Restrictions	317
a) The State Monopoly on the Legitimate Use of Force	317
b) Technological vs. Legal Enforceability	318
c) Substantive Scrutiny	318
2. Legal and Judicial Boundaries	319
a) Legislative Provisions	319
b) Judicial Case Law	320
c) The Example of Starter Interrupt Devices	321
III. The Variety of Legal Boundaries	322
1. Boundaries in European Contract Law	323
a) Unfair Terms Directive	323
b) Directive on Contracts for the Supply of Digital Content	323
3. Boundaries in National Law: Rules on Self-Help	324
a) Self-Execution as Self-Help	324
b) Legitimacy of Self-help	324
c) Smart Contracts as Legitimate Self-Help?	325
IV. Conclusion	326
T. The Payment with Bitcoins and other Virtual Currencies – Risks, liabilities and regulatory responses (Barrière)	327
I. Introduction	327
1. Blockchain	327
2. Money	327
3. Virtual currencies	328
4. Actors	329
5. Bitcoins	329
6. Benefits/Risks of Virtual Currencies	330
7. Law Enforcement	330
8. Variety of Characterization of Virtual Currencies	331
9. Regulatory Responses	332

Table of Contents

II. Financial Integrity Rules	333
1. Risks Scenarios.....	333
2. Gatekeepers.....	333
3. Anti-Money Laundering/Terrorist Financing Rules	334
a) Anonymity.....	334
b) Money Transmission Services?.....	334
c) Exchange Controls and Capital Flow Management	335
III. Consumer Protection.....	335
1. Disruption of Technology	335
2. Un-Regulated Entites.....	335
3. Frauds	336
4. Support of Risk.....	336
5. Offshore issues	336
6. Absence of Legal Tender	336
7. Price Risk	336
8. Virtual Currencies Exchanges	336
9. Concurrent Regulatory Jurisdiction	336
10. Taxation.....	337
11. Consumer Rules.....	338
IV. Financial and Monetary Stability.....	338
1. Systemic Risks.....	338
2. Monetary Policy.....	338
V. Conclusion.....	339
1. Substance over form	339
2. Limiting the anonymity of users	339
3. International Standards.....	339

Part 8
Concluding Remarks

U. Digital Revolution – New Challenges for Law: Final remarks (<i>van Erp</i>).....	341
--	------------

List of Authors

François Barrière is a Full Professor of Private Law at the University of Lyon 2. He is co-head of the contract law master 2 degree and chairman of the private law department. He is a member of the International Academy of Estate & Trust Law and a member of the scientific committee of AEDBF. His research focuses on contract law, financial law, corporate law, including with respect to digital issues.

Christoph Busch is Professor of Law at the University of Osnabrück. He is a Council member of the European Law Institute (ELI), co-chairman of the ELI Digital Law Special Interest Group and a member of the European Commission's "Expert Group to the Observatory on the Online Platform Economy". His research focuses on digital platforms, standardization of services and personalized law. He is principal investigator of the research project "Granular Society – Granular Law? Individuality and Normative Models in the Data Society" funded by the Volkswagen Foundation under a "Momentum" grant (2019–2024).

Alberto De Franceschi is Associate Professor of Private Law at the University of Ferrara (Italy). He is co-chairman of the European Law Institute's Digital Law Special Interest Group, founding member and co-editor of the Journal of European Consumer and Market Law and of The Italian Law Journal. He served as a consultant to the Italian Ministry of Justice in the legislative procedure at the EU Council for the adoption of the EU Directives 2019/770 on the supply of digital content and digital services and 2019/771 on the sale of goods. His research focuses on issues related to the supply of digital content and digital services, privacy regulation and online platforms.

Josef Drexl is Director of the Max Planck Institute for Innovation and Competition in Munich (since 2002), a Honorary Professor at the University of Munich and a member of the Bavarian Academy of Science. Professor Drexl is an expert in both competition law and intellectual property law. The competition law aspects of IP and international issues of both IP and competition law are among his major research interests. More recent work focuses on the IP and competition-law issues of the new digital economy in times of industry 4.0 and the Internet of Things.

Bénédicte Fauvarque-Cosson, Agrégée des facultés de droit, was appointed Conseillère d'Etat (as of October 1st 2018). She was previously *Professor of Law* at the University Panthéon-Assas, Paris II. She has been Vice-President of the European Law Institute and of the International Academy of Comparative Law. She publishes in French and in English in the field of European law, comparative law, contract law and Private international law.

Giorgio Giannone Codiglione is PhD in Comparative Law and has obtained the National Scientific Qualification to function as Associate Professor of the same subject. Research Assistant in Private Law at the University of Salerno, he is expert member of the "Human Rights" Committee at the Council of Bars and Law Societies of Europe (CCBE). He has published books, essays, comments and translations in the fields of Information and Communication Technology Law, Privacy and Data Protection, Copyright, Competition, Law of Remedies.

Michele Graziadei is Professor of Comparative Law at the University of Turin (Italy). His research concentrates on the methodology of comparative law, European private law, legal pluralism, law and autonomy. He has published widely in several languages. Since 2014, he is the President of the Italian Society for Research in Comparative Law (SIRD).

Geraint Howells was Dean and Chair Professor of Commercial Law at City University of Hong Kong when this contribution was written. In September 2019 he returned to the University of Manchester. He has researched consumer law over four decades and continues to be interested in consumer law and policy developments especially concerning the impact of the digital society on consumer protection.

Gabriele Mazzini has been working on Artificial Intelligence's policy at the European Commission since August 2017. As EU official, he previously held positions at the European Parliament's Legal Service (2004–2009) and the Court of Justice (2001–2003). From 2010 to 2017, Gabriele worked in the private sector in New York. He holds a LLM from Harvard Law School, a PhD in Italian and

List of Authors

Comparative Criminal Law from the University of Pavia and a Law Degree from the Catholic University in Milan. He is qualified to practice law in Italy and New York.

Francesco Mezzanotte is Assistant Professor of Private Law at the University of Roma Tre and Adjunct Professor at the Bocconi University in Milan. He has conducted researches at the Max Planck Institute for Innovation and Competition of Munich, and at the Max Planck Institute for Comparative and International Private Law of Hamburg. His research interests range on various topics of national and European private law, with particular focus on issue of property and intellectual property law. He is member of the editorial board of Italian legal journals and he serves as Italian reporter in different international scientific research projects.

Florian Möselein is Professor of Law at the Philipps-University Marburg, where he teaches Contract Law, Company Law and Capital Markets Law. He is also the Founding Director of the Institute of the Law and Regulation of Digitalisation (IRDi, www.irdi.institute). His current research focuses on the relationship between digital technologies and business law. He has held academic positions at Humboldt-University Berlin, the University of Bremen, and the University of St. Gallen, and visiting positions at Stanford Law School, the University of Berkeley and the European University Institute. He holds a degree in business administration, an LL.M. from the University of London, and a “licence en droit” from the University of Paris-Assas.

Francesco Paolo Patti is Associate Professor of Private Law at the University Bocconi, Milan. He received an LL.M. from the Westfälische Wilhelms-Universität Münster (2011) and a PhD from the Università degli Studi Sapienza of Rome (2014). He was Research Assistant at the European University Institute (2016) and Senior Research Fellow at the Max Planck Institute for Comparative and International Private Law (2018). His research focuses on European and comparative contract law, comparative succession law and autonomous vehicles liability.

Federica Pezza graduated with laude at the University of Naples. Federica is an Italian trainee lawyer, a CIPP/E holder and a PQ Trademark Attorney (UK), having recently completed the Certificate in Trade Mark Law and Practice with a Distinction at Queen Mary University of London, where she formerly graduated with a Distinction in the LLM program (IP). After having spent over a year as a legal trainee in the trademark department at the British American Tobacco company, Federica is currently practicing trademark and design law at Hogan Lovells in Alicante.

Giorgio Resta, PhD University of Pisa (1999), is full professor of comparative law at the University of Roma Tre. Senior Wainwright Fellow at McGill Law School, he taught courses as Visiting professor – among other Universities – at McGill, EHESS, Nagoya. Associate member of the International Academy of Comparative Law, ELI fellow, Honorary Member of the Italian Civil Law Association, and co-founder of the Italian Academy for the Internet Code, he is the author of more than 130 publications in the fields of new technologies and the law, property rights, data protection, comparative law.

Giovanni Maria Riccio is Professor of Comparative Law at the University of Salerno, where he teaches “Comparative IT Law”, “Copyright Law”, “Cultural Heritage Law”. Former Consultant of the EU Commission for the revision of the e-commerce directive, he has been an Academic Visitor at the Oxford Intellectual Property Research Centre and a Research Fellow at the Birbeck College of the University of London. He also taught at the University Ovidius of Constanta and at the University Joseph Fourier of Grenoble. He has published several articles in Italian and international law reviews. At the moment, he is editing a book on “Fundamental Rights and Copyright” for Elgar Publishing.

Federica Riente is an Italian Qualified Lawyer with the Right of Audience before the Supreme Court and the Higher Jurisdictions. She obtained a LL.M. in International Trade Law from the Northumbria University of Newcastle (UK). She is a Fellow of the European Law Institute and a member of the ELI Digital Law Special Interest Group. She has been involved for many years in professional training for Lawyers and organized several international courses at the King’s College of London and at the Humboldt University of Berlin on subjects of European Union Law, International Private Law and International Trade Law.

Martin Schmidt-Kessel (Doctorate Freiburg 2001; Habilitation Freiburg 2003) is full Professor of German and European Consumer Law, Private Law and Comparative Law and Director of the Centre for Consumer Law at the University of Bayreuth. He serves as Secretary General of the German Association of Comparative Law. He is Member of the European Law Institute and

List of Authors

Associate Member to the International Academy of Comparative Law. He serves as speaker of the Joint Doctorate Verona-Bayreuth in European Legal Studies.

Reiner Schulze is Professor of German and European civil law and Director of the Centre of European Private Law at the University of Münster (Germany). His main research interests are in the field of European trade and consumer protection law; the law of obligations (in particular contract law and tort law) and international contract law; and history of European Community law. He is a founding member of the European Law Institute; a honorary member of the Spanish “Real Academia de Jurisprudencia y Legislación”; a member of the Italian “Accademia Nazionale dei Lincei”; and of the Academia Europea.

Salvatore Sica is Full Professor of Private Law at the University of Salerno, Vice-President of the Scuola Superiore dell’Avvocatura and member of the Italian Bar Council. He has published extensively in the field of Information Communication Technology Law, Law of Torts, Law & Policy. Board member of the Italian Association of Comparative Law. Co-founder of the Italian Academy of the Internet Code and director of the IN.DI.CO. research laboratory (Information – Law – Communication) at the University of Salerno.

Christian Twigg-Flesner is Professor of International Commercial Law at the University of Warwick. He has written widely on Consumer, Contract and Commercial Law in their domestic, European and international dimensions. His current work focuses on the implications of the digital economy for commercial and consumer transactions.

Sjef van Erp is Vice-President of the ELI and Professor of Civil Law and European Private Law at Maastricht University (The Netherlands), where he teaches foundations of Ius Commune, comparative, European and Dutch property law. He is also deputy justice at the Court of Appeals in ‘s-Hertogenbosch (The Netherlands). He is a member of the American Law Institute (ALI). Professor Van Erp is one of ELI’s Founding members.

Friedrich Graf von Westphalen is name partner of the law offices “Friedrich Graf von Westphalen & Partner”, Cologne, Freiburg, Frankfurt, Bruxelles and Alicante; he is a lawyer, domiciled in Cologne, mainly active in arbitration cases. He is Honorary Professor at the University of Bielefeld since 2004. He has published very frequently on a large variety of topics, nationally and internationally.

Rolf H. Weber is Professor of international business law at Zurich University; there he acts as co-director of the Center for Information Technology, Society, and Law (ITSLS) and as co-director of the Blockchain Center. Furthermore, he is practicing attorney-at-law in one of the largest independent Swiss law firms in Zurich. His main fields of research and practice are IT- and Internet, international business, competition as well as international trade and finance law.

Christiane Wendehorst has been Professor of Civil Law at the University of Vienna since 2008. Amongst other functions, she is founding member and President of the European Law Institute (ELI) and co-chair of the German Data Ethics Commission (DEK). Currently, her work is focused on legal challenges arising from digitalization, and she has worked as an expert on subjects such as digital content, Internet of Things, artificial intelligence and data economy for, inter alia, the European Commission, the European Parliament and the German Federal Government, the ELI and the ALI.