

Jie Wang

Regulating Hosting ISPs' Responsibilities for Copyright Infringement

The Freedom to Operate in the US, EU
and China

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Chapter 1

Introduction



Today, ISPs (Internet Service Providers)¹ which host information directed at their subscribers, are commonly conducting business in an international market, some of them even successfully make their services part of netizens' daily life, such as YouTube, Facebook, and Twitter. In order to achieve commercial success on the international stage, it is necessary for hosting ISPs to know what legal risks they face, in other words their freedom to operate.

One of the legal risks originates from the dual use of hosting ISPs' services, and it is that their services can be used for both legal and illegal purposes. In particular, copyright owners always complain that their copyrighted materials are uploaded on hosting platforms without authorization.² Lawsuits have taken place between copyright owners and hosting ISPs worldwide. These lawsuits focus on dealing with whether hosting ISPs should be responsible for copyright infringement on their platforms and what kind of responsibilities should be imposed on them. Hence, in

¹ISP is the abbreviation of Internet service provider. According to the definition in the Digital Millennium Copyright Act (thereafter DMCA), an Internet service provider "means a provider of online services or network access, or the operator of facilities therefor." See DMCA Sec. 512 (k) (B). In the light of the definition in E-commerce Directive, an Internet service provider means "any natural or legal person providing an information society service". See Council E-commerce Directive of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market [2000] OJ L 178/1 (thereafter E-commerce Directive), Art. 2. Regarding "information society service," it means any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services. See Council Directive 98/48/EC of 20 July 1998 on amending Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations, Art. 1(2). Therefore, ISP is a broad concept which covers a wide range of natural and legal persons who provide services on the Internet at the request of the recipients of their services.

²For example, Viacom claimed that more than 150,000 clips of its copyrighted materials were available on YouTube without authorization, and these clips had been viewed "an astounding 1.5 billion times," so it demanded 1 billion US dollars in damages. See *YouTube law fight 'threatens net'*, BBC (2008), available at <http://news.bbc.co.uk/2/hi/technology/7420955.stm>. See also *Viacom International, INC. v. YouTube, INC.*, 718 F. Supp. 2d 514 (S.D.N.Y. 2010), *Viacom International, INC. v. YouTube, INC.*, 676 F.3d 19 (2nd Cir. 2012).

the context of copyright enforcement, the question of how much freedom to operate do hosting ISPs have is mainly dependent on the ambit of their responsibilities for copyright infringement.

Because copyright responsibility rules play a key role in regulating the freedom to operate of hosting ISPs, hosting ISPs may face the following two obstacles when conducting business on an international stage. First, hosting ISPs are obligated to undertake too many responsibilities against copyright infringement on their platforms, which unjustifiably shift the burden of enforcement from copyright owners to them. The unreasonable burden of enforcement may even stifle the freedom to operate of hosting ISPs. Second, in different jurisdictions hosting ISPs may be subject to different rules that regulate their responsibilities for copyright infringement, which exposes them to legal uncertainty when expanding their business in the international market.

This is the starting point of this research, which analyzes the importance of copyright responsibility rules in regulating the freedom to operate of hosting ISPs, and the legal obstacles faced by hosting ISPs when conducting business internationally. In order to remove these legal obstacles rooted in copyright responsibility rules, this research discusses the copyright responsibilities imposed on hosting ISPs in different jurisdictions (US, EU and China), and then examines how the responsibilities rules affect the freedom to operate of hosting ISP in these jurisdictions. Eventually, based on this examination, this research proposes how to regulate hosting ISPs' copyright responsibilities from the perspective of preserving maximum freedom for them to operate. The aim of this book is therefore to contribute to establishing the freedom to operate of hosting ISPs through examining and tailoring the rules of their copyright responsibilities in the US, EU and China. By doing so, it is submitted that hosting ISPs' freedom to operate can be maximized in the context of online copyright enforcement so that they can face less legal uncertainty when conducting business internationally.

To introduce the specific research questions, this chapter first explores the background of preserving the freedom to operate of hosting ISPs in the context of copyright enforcement (Sect. 1.1). After this exploration, it presents the definition of the problem (Sect. 1.2), and explains the methodologies and the outline of the book (Sect. 1.3).

1.1 Background

In the early days of hosting services, because of the limited available bandwidth, only text materials could be posted on hosting platforms, such as Usenet newsgroups. However, with the development of Internet technologies, larger sized documents, including images, music, software and even high-resolution movies, can now be posted on hosting ISPs' platforms, and this has aroused the concern of copyright owners. Regarding these uploaded contents, some are posted by Internet users without authorization, which may constitute copyright infringement. In such

cases, the Internet users who post infringing materials should in principle be held liable. However, because of the anonymization on the Internet, it is in fact impossible for copyright owners to identify these Internet users who commit copyright infringement and then ask them to assume liability. Further, it is also much less cost-effective to target Internet users, since illegal use occurs in high volume while the return from suing Internet users is really low.³ Therefore, copyright owners turn to hosting ISPs, who act as intermediaries and facilitators of distributing infringing materials, and claim that hosting ISPs should be responsible for infringement committed by their subscribers.

In the US, EU and China, lawsuits between copyright owners and hosting ISPs have been occurring on a large scale. In the US, a large number of hosting ISPs, including for example Netcom,⁴ Veoh,⁵ Rapidshare,⁶ YouTube,⁷ have been sued by copyright owners for the infringement on their platforms since the first of such cases occurred in 1993 where Frena was sued by Playboy as its copyrighted pictures were illegally posted on Frena's BBS⁸. In the EU, hosting ISPs, such as YouTube, Myspace, Dailymotion, Rapidshare, have also faced many lawsuits against them based on copyright infringement claims.⁹ In China, hosting ISPs faced a vast number of lawsuits launched by copyright owners, and for example, in January and February of 2009 alone, the Beijing Haidian District Court received more than 70 indictments requesting video-sharing websites to be liable for videos illegally posted by the subscribers.¹⁰ Such a large amount of lawsuits against hosting ISPs poses a big threat to their freedom to operate.

So far, the legislators in the US, EU and China have commonly adopted "safe harbor" provisions that exempt hosting ISPs from monetary liability under certain conditions,¹¹ which can help to ensure the freedom to operate of hosting ISPs. This section gives an overview of preserving the freedom to operate of hosting ISPs in the context of online copyright enforcement. It first looks back to "safe harbor"

³Lemley and Reese (2004).

⁴*Religious Technology Center v. Netcom On-line Communications Services*, 907 F. Supp. 1361 (N.D. Cal. 1995).

⁵*Io Group, Inc v. Veoh Networks, Inc.*, 586 Supp.2d 1132 (C.D.Cal. 2008).

⁶*Perfect 10, Inc. v. RapidShare*, No. 09-CV-2596 H (S.D. Cal., 2010).

⁷*Viacom International, INC. v. YouTube, INC.*, 676 F.3d 19 (2nd Cir. 2012).

⁸*Playboy Enterprises Inc. v. Frena*, 839 F.Supp. 1552 (M.D. Fla. 1993). BBS is the abbreviation for a bulletin board system. It is a computer server running custom software that allows users to connect to the system using a terminal program. Once logged in, the user can perform functions such as uploading and downloading software and data, reading news and bulletins, and exchanging messages with other users through email, public message boards, and sometimes via direct chatting. See Bulletin board system, Wikipedia, available at https://en.wikipedia.org/wiki/Bulletin_board_system (last visited 09-02-2014).

⁹These cases will be discussed in Chaps. 3 and 4.

¹⁰Wang et al. (2009).

¹¹See DMCA (n1), Sec. 512; E-commerce Directive (n1), Section 4; Internet Regulation (信息条例) (n1), Art. 14-17, Art. 20-25.

provisions, and explores the reasons to grant hosting ISPs liability privileges so as to ensure their freedom to operate (Sect. 1.1.1). Then, it explores the factors that justify the restriction of hosting ISPs' freedom to operate in the light of "safe harbor" provisions (Sect. 1.1.2). Finally, it presents an overview of the rules that regulate hosting ISPs' responsibilities for copyright infringement, and then addresses the challenges they bring to hosting ISPs in operation (Sect. 1.1.3).

1.1.1 Liability Privileges to Ensure the Freedom to Operate of Hosting ISPs

On the Internet, as copyright infringement is running rampant, for the sake of protecting copyright, ISPs, as gatekeepers on the Internet, may be ideally placed to take charge of copyright enforcement.¹² However, "safe harbor" provisions still grant ISPs liability privileges, which helps to ensuring the freedom to operate. ISPs' freedom to operate can be justified, because it contributes to promoting several social interests, which will be explored below.

The first justification is for promoting e-commerce. The importance of promoting e-commerce has been widely recognized in the documents relevant to "safe harbor" provisions. For example, the E-commerce Directive clearly states that "the development of electronic commerce within the information society offers significant employment opportunities in the Community, particularly in small and medium-sized enterprises, and will stimulate economic growth and investment in innovation by European companies, and can also enhance the competitiveness of European industry..."¹³ Even before the E-commerce Directive was enacted, there were already several reports published by the EU Commission which announced the importance of developing e-commerce. According to these reports, in order to facilitate e-commerce, it is necessary to clarify the responsibility of ISPs who transmit and store the information from third parties.¹⁴ In fact, "safe harbor" provisions, which grant ISPs liability privileges, do help to fulfil the policy aim of promoting e-commerce. According to the EU Commission, "safe harbor" provisions raise the legal certainty for Internet intermediaries, which reduces their business risks and expenses for legal consultants, and encourages the start-up in the Internet intermediary industry.¹⁵ Further, in the US, a House Report which was drafted by the Commerce Committee before enacting DMCA named e-commerce

¹²See Ginsburg (1995), Lichtman and Landes (2003), Carmichael (1995).

¹³E-commerce Directive (n1), Recital 2.

¹⁴See IP/97/313, Electronic Commerce: Commission Presents Framework for Future Action, 16 April 1997. IP/98/999, Electronic Commerce: Commission Proposes Legal Framework, 18 November 1998.

¹⁵Nielson et al. (2007).

as the emerging digital economy.¹⁶ At the end of 1997, about 7.4 million Americans were employed in the sectors relevant to e-commerce.¹⁷ In addition, this report also expected that e-commerce would grow very quickly, and that by 2002 the value of e-commerce would “range from \$200 billion to more than \$500 billion, compared to just \$2.6 billion in 1996.”¹⁸ Since the growth of e-commerce has had a profound influence on a nation’s economy and job market, promoting e-commerce should be taken into account when drafting the DMCA.¹⁹ In China, to promote the development of the Internet industry which is an important part of e-commerce, the Internet Regulation grants ISPs liability exemptions on certain conditions by referring to the DMCA and the E-commerce Directive.²⁰

The second justification is to ensure the efficiency of the Internet. In order to maintain the efficiency of the Internet, Internet intermediaries including hosting ISPs can only process such a large amount of information automatically. The Internet is characterized by efficiency in transmitting information, and information can be distributed on vast scales at unprecedented speeds on the Internet. Internet intermediaries substantially contribute to the aforesaid efficiency, since they process hundreds of millions of data transmissions each day, and host or link to tens of billions of items of third party content.²¹ Taking YouTube as an example, in 2015, more than 100 h of videos were uploaded to it every minute.²² In this regard, hosting ISPs are different from traditional publishers, because the latter need to choose, edit or even censor the content from third parties before distributing it. If hosting ISPs were required to undertake strict liability for copyright infringement as publishers do, they then would be forced to monitor the content uploaded by Internet users, which would unavoidably reduce the efficiency of internet transmission. Further, because the Internet today has become an important way for the public to access information and knowledge,²³ then if Internet transmission becomes less efficient, it will decrease the public’s ability to access information and knowledge. A report conducted by the United Nations Human Rights Council has even argued that, if holding ISPs liable for the content transmitted or created by Internet users, freedom of speech would be seriously undermined, in the words of

¹⁶Congress, U. S., House Report 105-551 (1998), Part II (thereafter H.R. REP. 105-551(II)), at 21.

¹⁷Ibid.

¹⁸Ibid.

¹⁹Ibid, at 22.

²⁰Zhang (2006).

²¹Lemley (2007).

²²Statistics, YouTube (2015), available at <http://www.youtube.com/yt/press/statistics.html> (last visited 21-09-2015).

²³As noted by the European Court of Human Right, “In the light of its accessibility and its capacity to store and communicate vast amounts of information, the Internet plays an important role in enhancing the public’s access to news and facilitating the sharing and dissemination of information generally.” See Application nos. 3002/03 and 23676/03 Times Newspapers Ltd (nos. 1 and 2) v. the United Kingdom [2009] EMLR 14, ECHR.

UN Human Rights Council: “it leads to self-protective and over-broad private censorship, often without transparency and due process of law.”²⁴

The third justification is to foster the development of Internet technologies. As noted by Jennifer Bretan, if no measure is adopted to protect ISPs from crushing liability, ISPs cannot provide the technical backbone to support the Internet anymore.²⁵ Therefore, ISPs, as the entities who develop and implement Internet technologies, ought to be granted liability privilege so as to guarantee their freedom to operate, and otherwise they would lack the motivation to develop and apply new Internet technologies.²⁶ This argument reflects the wisdom of liability rules that deal with the tension between copyright protection and dual-use technologies in the offline world.²⁷ As noted by Ginsburg, in order to keep the copyright incentive meaningful, it is necessary to grant copyright owners sufficient control over new ways of using their works, but not so much as to “stifle the spread of the new technologies of dissemination.”²⁸ In addition, promoting the development of technologies may generate the so-called “spillover” effects believed by Mark Lemley.²⁹ He argues that “economic evidence strongly suggests that those unanticipated future benefits, or ‘spillover’ effects, often exceed the immediate value of most new technologies.”³⁰ The video tape recorder technology discussed in the Sony case is a good example. After the Sony case, copyright owners later found video tape recorders could bring them a new and enormously profitable channel of distributing their works, and in the late 1990s, more than six millions units of video cassettes were rented or sold each year.³¹ Today, the “spillover” effects of hosting

²⁴Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, United Nations General Assembly, A/66/290, 10 August 2011, at 12.

²⁵Bretan (2003).

²⁶See generally Lemley and Reese, ‘Reducing digital copyright infringement without restricting innovation’ (n3), at 1386–1390. In this article, the authors demonstrate that if holding facilitators liable for the copyright infringement committed by their users, facilitators would not develop or apply new technologies to improve their services or products, which would obviously restrict the technological innovation.

²⁷In the early 1980s, Sony started to sell video tape recorders which could be used to record television programs, and finally, the US Supreme Court held that since the video tape recorders sold by Sony were capable of substantial non-infringing uses, the company was not liable for selling a product that might be used for infringing purposes. See *Sony Corp. of America v. Universal City Studios*, 464 U.S. 417 (1984). In the UK, *Amstrad Consumer Electronics* sold blank tapes with twin cassette decks which enabled the high speed copying of a recording from one tape to another, and eventually, the House of Lords rejected Amstrad’s copyright liability, because the blank tapes enabled the recording and copying of copyrighted materials, but such recording and copying might or might not be unlawful. *C.B.S. Songs Ltd and ors v. Amstrad Consumer Electronics Plc* [1988] 1 A.C. 1013. If the defendants in these two cases were held liable for copyright infringement, the technologies concerned would be banned.

²⁸Ginsburg (2001).

²⁹Lemley and Reese, ‘Reducing digital copyright infringement without restricting innovation’ (n3), at 1387.

³⁰*Ibid.*

³¹Liu (2005).

technologies have already started to benefit copyright owners, because hosting ISPs and copyright owners have reached many agreements which allow copyright owners to share the revenue of hosting ISPs.³²

1.1.2 Justification of Imposing Restriction on the Freedom to Operate of Hosting ISPs

Section 1.1.1 demonstrates that ensuring the freedom to operate of hosting ISPs can benefit several social interests. Therefore, it is reasonable for “safe harbor” provisions to grant hosting ISPs liability privilege so as to ensure their freedom to operate. Nevertheless, the liability privilege granted to hosting ISPs is not absolute. In fact, “safe harbor” provisions also indicate that restrictions may be imposed on the freedom to operate of hosting ISPs for the purpose of protecting other’s interests. In the EU, the liability rules of intermediaries should strike a delicate balance between the different interests concerned and promote cooperation between different parties so as to reduce the infringement on the Internet.³³ The legislative document of DMCA also notes that it is necessary to balance the interests of copyright owners, online service providers and information users in a proper way so as to foster the development of e-commerce.³⁴ In China, Internet Regulation also

³²For instance, since 2006, YouTube has signed a series of agreements with several copyright giants, including Warner Music Group, CBS Corporation, Universal Music Group and Sony BMG. According to these agreements, copyright owners can share the advertising revenue collected not only from videos in their brand channels, but also from the user-generated videos that incorporate the audio and audiovisual works copyrighted by them on YouTube. See Warner Music Group and YouTube Announce Landmark Video Distribution and Revenue Partnership, Warner Music Group (2006), available at <http://investors.wmg.com/phoenix.zhtml?c=182480&p=irol-newsArticle&ID=906153> (last visited 09-02-2013); CBS and Youtube Strike Strategic Content And Advertising Partnership, CBS Corporation (2006), available at <http://www.cbcorporation.com/news-article.php?id=23> (last visited 09-02-2013); Universal Music Group and YouTube Forge Strategic Partnership, Universal Music Group (2006), available at <http://www.universalmusic.com/corporate/detail/393> (last visited 13-09-2013); Sony BMG Music Entertainment Signs Content License Agreement with YouTube, Sony Music (2006), available at <http://www.sonymusic.com/sonymusic/sony-bmg-music-entertainment-signs-content-license-agreement-with-youtube/> (last visited 13-09-2013). In the EU, Dailymotion have also signed similar agreements with wide range of copyright owners, and in the light of these agreements, copyright owners can get as much as 70% of all advertising revenue created by their contents. See <http://official.dailymotion.com/en/> (last visited 15-09-2013). In China, Youku has signed corporation agreements with Sony Pictures Entertainment, Warner Brother, Dreamworks, Paramount, 21st Century Fox, Disney, and other copyright owners. See YoukuTudou signed a 5-year copyright licensing contract with Sony Picture (优酷土豆与索尼音像签订五年版权协议), it.sohu.com (2012), available at <http://it.sohu.com/20121106/n356832451.shtml> (last visited 18-09-2013).

³³IP/98/999 ‘Electronic Commerce: Commission Proposes Legal Framework’ (n14).

³⁴H.R. REP. 105-551(II) (n16), at 21.

aims at reconciling the interests of copyright owners, ISPs and Internet users.³⁵ Therefore, copyright protection and Internet users' interests may justify imposing restriction on hosting ISPs' freedom to operate in the US, EU and China.

Without imposing copyright responsibilities on hosting ISPs, hosting platforms would be recklessly used for copyright infringement, and hosting ISPs may even promote the infringing use of their services for profit. Therefore, it is commonly accepted that restriction ought to be imposed on hosting ISPs' freedom to operate for the purpose of protecting copyright. In light of "safe harbor" provisions, hosting ISPs can be exempted from copyright liability only when they comply with prescribed conditions.³⁶ Further, "safe harbor" provisions merely exempt a hosting ISP who complies with prescribed conditions from paying monetary damages, but regarding the other kind of reliefs, such as injunction, "safe harbor" provisions do not immunize hosting ISPs from them.³⁷ Therefore, even though "safe harbor" provisions have been adopted in the US, EU and China, hosting ISPs are still subject to several obligations of reinforcing copyright protection on their platforms.

Internet users' interests also affect how to define hosting ISPs' freedom to operate. As has been demonstrated in Sect. 1.1.1, ensuring the freedom to operate of hosting ISPs contributes to promoting e-commerce, keeping the efficiency of the Internet and fostering the development of Internet technologies. These three benefits cater for Internet users' interests, so in this sense, Internet users' interests help to justify ensuring the freedom to operate of hosting ISPs. In addition, Internet users' interests are concerned in tailoring hosting ISPs' obligations for copyright protection, because when hosting ISPs fulfill these obligations, it may raise the concerns on Internet users' human rights, including freedom of speech and privacy.³⁸

For example, notice-and-takedown procedures have been widely adopted so as to efficiently remove infringing materials from hosting platforms.³⁹ Nevertheless, this procedure not only facilitates the takedown of infringing materials but also

³⁵*Legislative Affair Office Answered Reporters' Questions on "Regulation on the Protection of the Right to Internet Dissemination of Information"* (法制办就《信息网络传播权保护条例》答记者问), xinhuanet.com (新华网) (2006), available at http://news.xinhuanet.com/politics/2006-05/29/content_4615669.htm.

³⁶For instance, hosting ISPs need to comply with several requirements so as to be exempted from monetary liability. Further, hosting ISPs also need to fulfill certain obligations in notice-and-takedown procedures and identity disclosure mechanisms according to "safe harbor" provisions. See generally DMCA § 512, Internet Regulation, E-commerce Directive Section 4. These duties will be discussed in detail in the following chapters.

³⁷See DMCA (n1), Sec. 512, (c)(1); E-commerce Directive (n1), Art. 14; Internet Regulation (网络条例) (n1), Art. 22.

³⁸See Seltzer (2010), Rantou (2012).

³⁹In the US and China, the notice-and-takedown procedure has been adopted into the "safe harbor" provisions, see DMCA (n1) 512 (c), (f), (g), and Internet Regulation (信息条例) (n1), Art. 14-17. In the EU, although E-commerce Directive has not adopted notice-and-takedown procedure, in the member states the statutory or self-regulatory notice-and-takedown procedures have been widely adopted. See Commission Staff Working Paper: Online Services, Including E-commerce, in the Single Market, SEC (2011) 1641 final, 11 January 2012, at 39-46.

results in the deletion of lawful materials, which may freeze freedom of expression.⁴⁰ Further, in order to ensure the copyright owners' right to sue anonymous Internet users, ISPs are required to disclose the Internet users' identities under certain circumstances, which can be named as "identity disclosure mechanism".⁴¹ Yet, the disclosure of Internet users' identities may conflict with their privacy.⁴² In addition, anonymity is considered to play an important role in guaranteeing freedom of expression, because anonymity not only allows the public to deliver freely their opinions about "their interests, beliefs and political ideologies without fear of reprisals from the state or any other powerful organization," but also "permits others to receive these views."⁴³ Therefore, the obligation of disclosing Internet users' identities may also conflict with freedom of speech. Besides, filtering technologies have been widely adopted by hosting ISPs so as to reduce copyright infringement on their platforms,⁴⁴ which raises the concerns about accommodating

⁴⁰In order to protest against the misuse of takedown notices, a website called "Chilling Effects Clearinghouse" has been set up to allow the public to report the notices they receive. See <https://www.chillingeffects.org/index.cgi>, (last visited 22-08-2014). In the light of research done on the 876 notices reported to Chilling Effects, Urban and Quilter noted that nearly 30% of takedown notices sent to Google were based on flawed or highly questionable copyright claims. See Urban and Quilter (2005). Another research done by the Brennan Center for Justice at New York University revealed that, among 245 takedown notices reported to Chilling effects in 2004, 63% of the notices "either targeted material with a fair use/First Amendment defense or stated a weak IP claim." See Heins and Beckles (2005).

⁴¹In the US, DMCA 512 (h) grants copyright owners the rights to apply subpoenas for the purpose of disclosing Internet users' identities. In China, according to Article 13 of Internet Regulations, the administrative department of copyrights may, with the purpose of investigating the infringements upon the right to network dissemination of information, require the relevant Internet service provider to provide such materials as the names, contact information, and the web address of its service objects who are suspected of committing copyright infringement. Further, in terms of Internet Interpretation (2006), copyright owners also can request the registration information of Internet users from hosting ISPs for the purpose of suing the Internet users for copyright infringement. In the EU, there are several directives indicating that Internet users' data can be disclosed for the purpose of protecting copyright, see Article 13 of General Data Protection Directive (Directive 95/46/EC), Article 15 of E-privacy Directive (Directive 2002/58/EC), Article 15(2) of E-commerce Directive and Article 8 of IP Enforcement Directive (Directive 2004/48/EC).

⁴²Cohen (2002), Katyal (2004), Edwards (2009). In these articles, the authors argue that copyright protection endangers privacy.

⁴³Williams (2005).

⁴⁴Case law in some jurisdictions requires hosting ISPs to adopt reasonable filtering technologies, see BGH 15 August 2013, No. I ZR 80/12, *Han Han v. Baidu* (韩寒诉百度), Beijing Haidian District Court, No. 5558 Hai Min Chu Zi (2012) (2012海民初字第5558号). Further, in light of self-regulation agreements, hosting ISPs also need to adopt filtering technologies, see Principles for User Generated Content Services (2007), available at <http://www.ugcprinciples.com/> (last visited 12-06-2015); self-discipline treaty on Internet audio-video program services in China (中国互联网视听节目服务自律公约), State Administration of Radio Film and Television (国家广电总局) (2008), available at <http://www.sarft.gov.cn/articles/2008/02/22/20080226114116260491.html> (last visited 16-06-2015). YouTube also establishes its own filtering system named "Content ID", see How Content ID works, available at <https://support.google.com/youtube/answer/2797370?hl=en> (last visited 18-06-2015).

fair use.⁴⁵ Therefore, filtering technologies may result in over-filtering, which negatively affects the freedom of speech enjoyed by Internet users.

1.1.3 Operating Challenges for Hosting ISPs in the US, EU and China

For a hosting ISP which is operating or planning to operate in the US, EU and China, it may face two challenges resulting from the copyright responsibility rules in these three jurisdictions. First, copyright responsibilities imposed on hosting ISPs are diverse in the US, EU and China, and this poses legal uncertainty in front of hosting ISPs. Second, responsibility rules impose unreasonable burdens on hosting ISPs in some cases.

Hosting ISPs, as facilitators of information transmission on the Internet, may assume secondary liability for the infringing materials posted by their subscribers. As will be seen in Chap. 2, rules of indirect copyright infringement in the US, EU and China are diverse. In the US, contributory infringement and vicarious liability have been developed by case law;⁴⁶ in the EU, different Member States rely on different rules to regulate indirect copyright infringement;⁴⁷ in China, courts refer to joint infringement theory when deciding the cases about indirect copyright infringement, and particularly assess whether a defendant fulfills his duty of care to prevent infringement.

Liability privileges rules in the US, EU and China have reached a certain degree of harmonization, but differences still exist in many aspects.⁴⁸ First, “Safe harbor” provisions have been adopted in the US, EU and China, and they share many common points. For instance, hosting ISPs have no general obligation to monitor the materials uploaded on their platforms.⁴⁹ Further, in order to benefit from liability exemption,

⁴⁵Sawyer (2009). In this article, Sawyer asserts that given that fair use is such a major challenge for the courts to evaluate, it is almost impossible for any technological solution to reach accurate determinations. See also Fair Use Principles for User Generated Video Content, Electronic Frontier Foundation (2007), available at <https://www.eff.org/pages/fair-use-principles-user-generated-video-content> (last visited 28-07-2014). In this report, Electronic Frontier Foundation (EFF) also claims that filtering technologies can hardly accommodate fair use.

⁴⁶Regarding what are contributory infringement and vicarious liability, see Sec. 2.1.1.

⁴⁷As presented in Chap. 2, the UK has developed authorization infringement and joint tortfeasance, but the civil law countries, such as Germany, France and Italy, the courts usually decide the indirect copyright infringement cases by referring to the general liability rules, particularly the duty of care notion, in tort law.

⁴⁸As noted by Daniel Seng, “safe harbor” provisions have indeed become a global standard to limit ISPs’ liability for indirect copyright infringement, but interpretational problems still exist. See Seng D, Comparative Analysis of National Approaches of the Liability of the Internet Intermediaries (Preliminary Version), para. 6, available at http://www.wipo.int/export/sites/www/copyright/en/doc/liability_of_internet_intermediaries.pdf (last visited 04-03-2016).

⁴⁹DMCA (n1), Sec. 512, (m) (1); E-commerce Directive (n1), Art. 15.

hosting ISPs should not know the infringement in question, or upon knowing the infringement, they should expeditiously remove the infringing materials.⁵⁰ Third, hosting ISPs are obligated to disclose suspected users' identities to copyright owners or competent authorities under prescribed conditions.⁵¹ Nevertheless, "safe harbor" provisions in the US, EU and China still include several different provisions. For example, the US and China have codified notice-and-takedown procedures in their "safe harbor" provisions, but the E-commerce Directive leaves this procedure for the Member state to develop by themselves.⁵² Further, the "safe harbor" provisions in the US include a provision which requires hosting ISPs to terminate the accounts of subscribers who commit infringements repeatedly,⁵³ but the EU and China have not adopted this provision in their "safe harbor" provisions. Besides, as will be seen in Chap. 2, there are still several other differences existing between "safe harbor" provisions in the US, EU and China. Furthermore, as will be demonstrated in Chaps. 3, 4, 5 and 6, even regarding those same or similar provisions, courts in different jurisdictions tend to interpret them in different ways, which results in different impacts on hosting ISPs' freedom to operate.

Some responsibility rules developed by case law may impose an unreasonable burden on hosting ISPs. As will be seen in Chap. 4, in order to better protect copyright on hosting platforms, a certain effort has been made to reinforce hosting ISPs' responsibilities for copyright infringement. Regarding secondary liability, the courts in the US, EU and China tend to decide hosting ISPs' liability by taking into account some factors which are not prescribed in "safe harbor" provisions, such as the hosting ISPs' intent and business model, specific monitoring obligations against repeat infringement, and better protection for highly valuable contents.⁵⁴ Strong arguments can be found to support the courts to take into account these factors. However, in the light of case law in these jurisdictions, these factors, including imputed intent, illegal business model and specific monitoring obligation, can easily be too broadly interpreted by courts, which may stifle hosting ISPs' freedom to conduct legal business.⁵⁵ Further, as will be seen in Chap. 5, if the following questions are not properly dealt with, notice-and-takedown procedures would also impose an unreasonable burden on hosting ISPs. These questions are: how to define a competent notice, how to deal with defect notices, how to define "expeditiously removing", how to regulate the liability of wrong removing, and whether the validity of ex ante notices should be recognized.⁵⁶

⁵⁰DMCA (n1), Sec. 512 (c) (1) (A); E-commerce Directive (n1), Art. 14, 1; Internet Regulation (网络条例) (n1), Art. 22 (3).

⁵¹DMCA (n1), Sec. 512 (h); E-commerce Directive (n1), Art. 15; Internet Regulation (网络条例) (n1), Art. 15-17, Art. 24.

⁵²DMCA (n1), Sec. 512 c (3) and g; E-commerce Directive (n1), Recital 40.

⁵³DMCA (n1), Sec. 512 (i).

⁵⁴See Sect. 4.7.

⁵⁵Ibid.

⁵⁶See Sect. 5.4.

1.2 Definition of the Problem

“Safe harbor” provisions have been commonly adopted in the US, EU and China so as to ensure the freedom to operate of hosting ISPs. Some strong arguments, including promoting e-commerce, keeping the efficiency of the Internet and fostering the development of information technologies, can be built to justify granting liability privileges to hosting ISPs. Nevertheless, the liability privileges granted to hosting ISPs are conditional rather than absolute, because as revealed by the legislative documents relevant to “safe harbor” provisions, the freedom to operate of hosting ISPs can be restricted for the sake of protecting copyright and Internet users’ interests.

In the US, EU and China, the rules of indirect copyright infringement are diverse. Further, although a certain level of harmonization has been reached in respect of liability privilege rules, these rules still include some different provisions, and more importantly, even regarding these similar or same provisions, the courts in the US, EU and China tend to interpret them in different ways. Therefore, hosting ISPs are exposed to diverse copyright responsibilities in the US, EU and China, which poses legal uncertainty for them when conducting business in these jurisdictions. In addition, the courts in the US, EU and China may interpret copyright responsibility rules in ways that impose too much burden on hosting ISPs, which unreasonably restricts their freedom to operate.

This book aims at answering a main research question: *how to regulate hosting ISPs’ responsibilities for copyright infringement while preserving their maximum freedom to operate in the US, EU and China?*

So far, hosting ISPs’ copyright responsibilities, which affect how much freedom to operate can be preserved to hosting ISPs, have mainly come from three sources, and they are copyright liability, facilitating obligations and self-regulatory duties. Regarding copyright liability, hosting ISPs do not upload infringing content by themselves, but as intermediaries, they may need to undertake secondary liability for the copyright infringement committed by their users. Nevertheless, in order to ensure hosting ISPs’ freedom to operate, “safe harbor” provisions grant hosting ISPs liability exemptions under prescribed conditions. Besides secondary liability, hosting ISPs also need to fulfill certain obligations, such as taking down infringing materials upon receiving competent notices and disclosing Internet users’ identities to copyright owners, so as to facilitate copyright enforcement on their platforms. These two levels of responsibilities are regulated by the state regulation, including legislation, case law and administrative orders. The third level of responsibility means the duties that need to be fulfilled by hosting ISPs in terms of self-regulatory norms mainly reached between private entities. Self-regulation prevails, since the traditional regulatory norms fail to settle the disputes between copyright owners and hosting ISPs.⁵⁷

⁵⁷Hugenholtz (2010).

Based on the above observation, to answer the main research question, this book focuses on addressing the following sub-questions:

- (i) *Should hosting ISPs be required to keep purely passive so as to fall under “safe harbor” provisions;*
- (ii) *How do the courts interpret the factors that are relevant to decide hosting ISPs’ copyright liability under “safe harbor” provisions; and*
- (iii) *Whether the liability criteria that are developed by the case law are capable of preserving maximum freedom for hosting ISPs to operate;*
- (iv) *How notice-and-takedown procedures ought to be interpreted so as to avoid imposing unreasonable duties on hosting ISPs; and*
- (v) *Whether hosting ISPs should be given more duties to ensure the accuracy of notices;*
- (vi) *How hosting ISPs’ duties ought to be tailored in identity disclosure mechanisms;*
- (vii) *Whether self-regulation can better preserve the freedom to operate of hosting ISPs.*

This book discusses how to preserve maximum freedom to operate for hosting ISPs in the context of online copyright enforcement, so it will only deal with how copyright responsibility rules may restrict hosting ISPs’ freedom to operate in the US, EU and China. As for other rules which may impose restrictions on hosting ISPs’ freedom to operate, this book will not take them into account. Hence, this book will not assess how the censorship regime in China restricts hosting ISPs’ freedom to operate. Further, in operation, hosting ISPs collect Internet users’ personal data and exploit these data commercially, which may commit privacy violation. The restrictions resulting from privacy laws in this context will not be discussed in this book, and it will only evaluate how privacy protection affects the copyright responsibilities imposed on hosting ISPs, particularly in identity disclosure mechanisms. In addition, for hosting ISPs which acquire a position of dominance in the market may also face anti-trust violation complaints, and this book will not discuss restrictions based on anti-trust concerns. Moreover, although this study covers several jurisdictions, it will not discuss the issue of whether and how the copyright responsibility rules in one jurisdiction can be applied in another jurisdiction, so private international law is outside of the scope of this study. Finally, the EU and the US have been active in negotiating multilateral and bilateral trade agreements which may also include some clauses that regulate hosting ISPs’ responsibilities for copyright infringement, such as Anti-Counterfeiting Trade Agreement (ACTA). However, lots of concerns on protecting fundamental rights has been raised against these trade agreements, and ACTA was even rejected by the European Parliament in 2012.⁵⁸ Therefore, it is still unclear how these trade agreements affect hosting ISPs’ copyright responsibilities, and this book will not discuss about them.

⁵⁸Baraliuc et al. (2013).

1.3 Methodology and Outline of the Book

To answer the research questions stated above, this book mainly takes a comparative approach to examine how hosting ISPs' responsibilities for copyright infringement is dealt with in the US, EU and China. Because the Internet is borderless, hosting ISPs conceptually conduct business in an international market. In fact, many hosting ISPs are conducting business or at least are willing to conduct business internationally. The US, EU and China are the 3 largest economies in the world, so ambitious hosting ISPs would naturally like to conduct business in these three markets. The comparison of copyright responsibilities imposed on hosting ISPs in these three jurisdictions will help hosting ISPs to assess the legal risks they face, and then draw a map of freedom to conduct business in these respective areas. Further, when dealing with hosting ISPs' responsibilities for copyright infringement, courts in the US, EU and China apply different rules or interpret substantially similar rules in different ways, which results in various impacts on hosting ISPs' freedom to operate. The comparison therefore also helps to find the best way of regulating hosting ISPs' copyright responsibilities in regard to preserving for them the maximum freedom to operate. Finally, "safe harbor" provisions play a vital role in regulating hosting ISPs' copyright responsibilities, since such provisions are not only related to deciding hosting ISPs' liability, but also relevant to the application of notice-and-takedown procedures and identity disclosure mechanisms.⁵⁹ After the first "safe harbor" provisions were adopted in the US, the EU and China also enacted their own "safe harbor" provisions by referring to the US version. In this respect, a certain degree of harmonization has already been reached in regulating hosting ISPs' copyright responsibilities, and the author believes that further harmonization in interpreting "safe harbor" provisions will enhance hosting ISPs' freedom to operate in these jurisdictions. The comparison can help to evaluate whether and how the further harmonization can be done in the US, EU and China. To answer the last sub-question, the comparative study is still employed, because comparison needs to be done between state-regulatory norms and self-regulatory norms.

In the EU, since relevant Directives and ECJ decisions leave much room for member states to interpret related rules, in order to look deeper into how hosting ISPs' copyright responsibilities are regulated in the EU, this book also explores the

⁵⁹“Safe harbor” provisions not only include the rules on deciding whether hosting ISPs are monetarily liable for the infringement committed by their users, but also prescribe notice-and-takedown procedures and the disclosure of personal identity. See generally DMCA § 512, Internet Regulation, E-commerce Directive Section 4. Although E-commerce Directive does not include the detailed rules about notice-and-takedown procedures, because in light of Article 14, hosting ISPs need to immediately remove infringing materials upon knowing them, a de facto notice-and-takedown procedure has been widely recognized in the EU. Further, the Recital 14 of E-commerce Directive also refers to the Directives on privacy protection, and these Directives allow Internet users' identities to be disclosed for the purpose of copyright protection. The detailed discussion will be done in Chap. 2.

legislations and case law in several member states. In fact, several member states have developed their own liability rules when applying “safe harbor” provisions, such as notice-and-staydown mechanism in France, disturber’s liability in Germany, active hosting theory in Italy, authorization infringement and joint tortfeasor in the UK. These specific liability rules affect how much freedom a hosting ISP is allowed to operate, so in order to answer better the first three sub-questions, this book evaluates how hosting ISPs’ copyright liability is regulated in these four member states under the auspices of the EU jurisdiction.

Further, regarding case study, since the EU “safe harbor” provisions not only cover online copyright disputes but also online trademark infringement, when discussing how the “safe harbor” provisions are interpreted by the courts in the EU, the related trademark cases are also analyzed, particularly these trademark cases decided by the ECJ and supreme courts in member states. In China, the hosting ISPs share the common notice-and-takedown procedure with the ISPs who run information location tools, so the case law of the latter is also under examination, when discussing how the Chinese courts interpret the notice-and-takedown procedure.

Besides the Introduction, this book consists of 7 chapters. Chapter 2 describes the rules of hosting ISPs’ responsibilities for copyright infringement, including the liability rules about indirect copyright infringement and “safe harbor” provisions in the US, EU and China, which establish the basis for the analysis of relevant case law in the next four chapters. Although “safe harbor” provisions grant certain liability privileges to hosting ISPs, hosting ISPs should keep passive as a pre-condition to falling under “safe harbor” Provisions. Chapter 3 takes a comparative approach to examine the relevant case law in the US, EU and China, and then summarizes on what basis the courts in these three jurisdictions hold hosting ISPs as not qualifying for keeping passive. Based on the comparison, this chapter suggests, in order to maximize hosting ISPs’ freedom to operate, what factors should be taken into account by courts when deciding whether a hosting ISP keeps passive or not. After discussing the threshold of “safe harbor” provisions, Chap. 4 takes a comparative approach to analyze how the courts in the US, EU and China decide a hosting ISPs’ liability under the roof of “safe harbor” provisions. This chapter summarizes the factors relevant to conclude liability, including general monitoring obligation, knowledge of infringement, receiving benefits, measures against repeat infringement and inducement, and then compare how the courts in each jurisdiction evaluate these factors. Finally, based on the comparison, this chapter identifies the tendencies regarding regulating the secondary liability of hosting ISPs from the perspective of case law. Then, it evaluates these liability rules developed from case law so as to check whether they are capable of preserving the maximum freedom to operate for hosting ISPs, and if not, how they should be adjusted.

Besides undertaking secondary liability under certain circumstances, hosting ISPs are also required to fulfill certain duties that facilitate copyright protection. In order to deal with the overwhelming copyright infringement on the Internet, the “safe harbor” provisions in the US and China codify notice-and-takedown

procedures, according to which a hosting ISP should remove the alleged infringing materials after receiving competent notices. In the EU, although the E-commerce Directive does not include a detailed notice-and-takedown procedure, the notice-and-takedown procedures have been developed in member states, since after a hosting ISP receives the notices which can lead to its knowledge of infringing material, it is obligated to expeditiously remove the infringing materials. Chapter 5 compares the notice-and-takedown procedures in the US, EU and China, and analyzes how the courts in these jurisdictions interpret the key issues in notice-and-takedown procedures,⁶⁰ such as how to define a competent notice, how to deal with defective notices, how to define “expeditiously remove”, how to regulate the liability of wrong deletion, and the validity of ex ante notices. Based on comparison, it concludes how these key issues ought to be interpreted so as to maximize hosting ISPs’ freedom to operate. Besides, this chapter rethinks the current notice-and-takedown procedures in the US, EU and China, and then discusses hosting ISPs’ duties in reducing the abuse of the procedures.

Since the Internet is characterized by anonymization, which causes lots of troubles for copyright owners to trace the infringing Internet users, hosting ISPs are obligated to disclose the suspect Internet users’ personal identities under the circumstances prescribed by laws. Chapter 6 compares the rules of disclosing Internet users’ personal identities in the US, EU and China. By comparison, it summarizes the duties imposed on hosting ISPs by identity disclosure mechanisms in these jurisdictions, and then analyzes the reasonable boundary of these duties.

The disputes between copyright owners and hosting ISPs have not been solved through state regulation, so at a private level, hosting ISPs and copyright owners start to cooperate with each other and reach self-regulation agreements so as to avoid endless lawsuits.⁶¹ Chapter 7 explores two different types of self-regulation, which are codes of conduct and second level agreements reached between hosting ISPs and copyright owners. It first looks into the norms set in codes of conduct and second level agreements, respectively. Then, it evaluates these norms by comparing them with state regulation, and examines whether self-regulation can better preserve hosting ISPs’ freedom to operate.

In the conclusion part, Chap. 8 summarizes and assesses the research findings in previous chapters, and then answers the questions of how to regulate hosting ISPs’ responsibilities for copyright infringement while preserving their maximum freedom to operate in the US, EU and China. By deducing from Chaps. 3 and 4, it summarizes how the courts in the US, EU and China decide hosting ISPs’ copyright liability under the roof of “safe harbor” provisions, and then suggests how the

⁶⁰The notice-and-takedown procedures in the EU turn out to be very fragmented. Some member states have adopted statutory notice-and-takedown procedures, including Finland, Hungary and Lithuania. Some other member states, such as France, Italy and UK, rule on the elements of a competent notice in their national legislations about implementing E-commerce Directive. There also exist member states which have not ruled on the elements of a competent notice at legislative level, including Holland and Germany. See Sec. 5.2 of this thesis.

⁶¹Hugenholtz, ‘Codes of Conduct and Copyright Enforcement in Cyberspace’ (n57), at 303.