

# Music is Boundless but License Has Boundaries: Research on License of Streaming Music Services and the Differences Between the United States and China

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**Abstract:** *This paper examines the licensing patterns of music streaming services, focusing on the challenges and opportunities presented by this rapidly growing sector. It analyzes the current statutory framework and commercial practices in the US and China, highlighting the differences in economic, political, and cultural contexts. The paper argues that the current licensing model is insufficient and unfair, particularly for artists who lack negotiation power. It proposes a more voluntary and less compulsory licensing pattern to encourage fair competition and provide artists with greater control over their work. The paper also explores the evolution of music dissemination from traditional ownership models to access-based streaming, and the impact of this shift on copyright holders, music platforms, and consumers.*

**Keywords:** Streaming music, Copyright licensing, Fair competition.

## 1. Introduction

In recent years, the music world has witnessed a great evolution of dissemination and sharing methods. The key features of this evolution are the rapid growth of music streaming and a continued evolution from traditional models of music ownership to the new fast growing model access. The music industry is facing the transitions from physical to digital, PC to mobile and download to streaming at the same time [1]. According to *IFPI Global Music Report 2016*, the global music market achieved a key milestone in 2015 when digital became the primary revenue stream for recorded music, overtaking sales of physical formats for the first time [2]. In addition, streaming remains the industry's fastest-growing revenue source, which increased 45.2 percent to US\$ 2.9 billion and, over the five year period up to 2015, have grown more than four-fold [3]. A double-digit percentage increase in global revenues from streaming in 2023 (up 10.4% to US\$19.3 billion) was the key driver of overall global growth. Streaming accounted for more than two-thirds (67.3%) of the total global market [4]. However, the artists take different attitudes towards stream music, especially for its free services.

In November, 2014, Taylor Swift pulled her single “*Shake It Off*” and all of her previously released music from Spotify, which is a streaming music services platform enjoying 40 million users [5]. Comparing to \$6 million she earned from Spotify every year, one week of album sales for Swift's album “*1989*” would do around \$12 million in gross sales [6]. From Taylor's perspective, music is art and art is rare, which should be paid for. She doesn't think streaming services especially free subscription appropriately value her art. She hoped that the independent artists should also be aware of these facts and not underestimate themselves [7]. One year later, In November, 2015, Adele declared that her third record “*25*”, cannot be available on streaming services such as Spotify and Apple Music with complaints on their free subscription services [8]. However, the album is available on iTunes and amazon as well as in shops.

In contrast, some “old” music players began to accept stream services while they opposed to this new format several years ago. Although Pink Floyd has held out against Spotify for quite some time, the rocker's catalog has arrived on the streaming service since 2013 [9]. The band has been wary of music's new digital landscape and they sued EMI in 2010 for allowing single-song, instead of full-album, downloads on iTunes [10]. Since December 24, 2015, the world's most famous band, Beatles has been available on streaming music services widely, including almost all of the stream services platforms such as Spotify, Apple Music, Google Play and Tidal [11]. It is worth noting that unlike Taylor Swift, the Beatles are available on the free versions of services like Spotify.

Streaming is a general method of delivering and playing back data over the internet. Prior to the advent of streaming technology, a user who wished to access an audio file online had to download the entire file from a foreign location before it would play on their computer [12]. To adapt the great changes, music and software industries have experimented with different models and programs that have enabled the public to get access to songs more efficiently through their own desktop computers, and later through their mobile devices. Some of these experiments have failed and have been declared to infringe exclusive distribution and performance rights within the meaning of the *Copyright Act* [13]. However, trials and innovation have not ceased, and the future of listening to music has started to take its shape. Some of the big players in the current market are digital music platforms, such as Spotify and Pandora, which fund their services by selling advertisements and offering paid subscriptions, thus enabling their users to mass music at a lower cost than pay-per-download services, such as the iTunes Store [14]. These digital music platforms' provide contents both in public domain and the copyrighted works, and for the latter, licenses must be obtained.

So some issues come out on license under stream music services. How do the stream services run? What kinds of rights do digital music platforms have to be licensed in order to run? What kinds of rights do consumers enjoy under stream music services and what is the differences between the steam services and the traditional patterns? Why do some big artists think their works are not valued sufficiently while the platforms pay around 70% of their revenues for obtaining license every year? And how can we establish a more voluntary but less compulsory license pattern? So many questions are waited to be answered in the stream music world. This paper will focus on the license pattern of stream music services based on the current statutory framework and commercial practice and will propose how to establish a more voluntary but less compulsory license pattern. In addition, this paper will compare the differences of license for stream music between the United States and China from the perspectives of economical, political and cultural backgrounds.

Part I will talk about how the stream music services run and the changes on the digital music market and copyright management brought by stream music services. Comparing to downloading, streaming is a form of digital transmission technology that users can get access to the materials online without holding the materials on their terminal devices. This significant change will greatly influence the rights of various subjects in the digital music market, including copyright holders, music platforms, consumers, Performance Rights Organizations (PROs, like ASCAP, BMI, SESAC), and administrative authorities. In this paper, we will focus on the rights of copyright holders, music platforms and consumers in the process of licensing.

Part II will analyze the current statutory framework and commercial practice of license on streaming music and why they cannot support a sufficient and fair license pattern. According to 17 U.S.C § 102, sound recordings and musical works such as lyrics and rhymes are protected under the *Copyright Act*. So the digital music platforms have to obtain licenses both for sound recordings and musical works with the rights of reproduction and public performance. To adapt to the changes of digital music, the Congress has enacted 17 U.S.C §112 and §114 to distinguish interactive services from non-interactive services. For the non-interactive service providers, they can obtain the right of public performance through statutory license but the interactive service providers must negotiate directly with the copyright owners to get the license. Pandora and Spotify will be used as examples to discuss how they obtain legal license by statutory license or voluntary negotiations with copyright owners. This part also discusses the reasons why the big artists and independent artists take different attitudes towards stream services.

Part III will propose a more sufficient and reasonable license pattern should be established to motivate fair and dynamic competition in digital music industry and what factors should be considered for achieving this objective. Firstly, Under the current statutory framework, the stream music platforms tend to negotiate with PROs for collective copyright license or with music labels for the contents they hold, so the artists themselves have little negotiation power and sufficient transparency lacks. Secondly, how to decide the reasonable royalties for license is another important issue. It should be

noted that the stream service is a booming trend in the digital music world but it is not the ONLY way to enjoy music. Artists and consumers should have more options in today's world.

What's more, the differences of stream music services on commercial practices and legal frameworks between the United States and China will be compared in each part. A decade ago, one of the most serious issues for digital music in China is piracy. But in recent years, the Chinese government and the music companies have taken measures to protect and manage music copyright. However, a sustainable commercial pattern has not been established. The digital music companies invest a large amount of money to obtain exclusive license but cannot acquire sufficient revenues. In addition, the sources of revenues for these music platforms are different between the two countries. The music platforms in China provide more networking services and earn revenues from this. The paper also analyzes why the foreign music platforms are difficult to be available in China.

## **2. How the Streaming Music Services Run and Reshape the Copyright Framework**

The last 30 years has seen great changes of music formats, from vinyl to CDs, then from downloading to streaming. In vinyl or CD times, consumer have to a buy a whole complete album; In downloading times, consumers can download a single via Internet by less than one dollar [15]; Under streaming services, one can enjoy music online without holding a physical copy or an intangible copy on your terminal players at all.

### **2.1 The Technological Perspective**

The distribution of a song in the streaming business model occurs practically every time a song gets played on a streaming music service. The music player on the consumer's end, whether through an application or in-browser, stores a copy of the digital file in the device's random access memory (RAM). Although the technical language of copyright law can qualify this as a reproduction, interpretation of the law delineates digital files stored in RAM not as a reproduction because the file is not transferable or readily accessible as with a digital download.

Lessig, in his book *Code 2.0*, provides an analysis of internet regulation, identifying for elements that can influence behavior online. They are laws, market forces, social norms and code [16]. Specially, Lessig regards code as the most basic factor of the cyberspace. As for the streaming music, the technological pattern decides how the commercial practices run and what kind of legal relationship are formed. For example, the digital contents are stored in RAM for a while to provide online services for consumers. But the related issues are whether this storage constitutes reproduction or not and whether the digital music platforms have to obtain license on the right of reproduction under 17 U.S.C. § 106 from copyright owners.

A musical recording played under stream music includes two kinds of works: a "musical work" and a "sound recording" under copyright law [17]. The "musical work" is the

underlying composition of a song, such as the sequence of notes and rhythms put together by the songwriter. A “sound recording” is a recorded performance of a musical work. It is a “fixation of sounds, including a fixation of a performance of someone playing [and/or] singing a musical work [18].” The songs’ composer and lyricist own the musical composition copyright jointly, but they typically assign this right to a publisher company, which manages all rights and royalty distribution. Likewise, the artist’s record label, not the artist himself, typically owns the song’s sound recording right [19]. The *Copyright Act* grants copyright owners the right to control certain uses of their works, including the exclusive rights to reproduce and to publicly perform copyrighted works. These are the rights most relevant to stream music transmissions.

**Table 1:** The Legal Rights about A Musical Recording Played Under Streaming Music

What	Who creates it	Who has the right to assign or license
Musical work	Songwriters like composers or lyricists	Publisher companies
Sound recording	Artists	Record labels

2.1.1 “Reproduction” under Tangible Times

We look back upon the development of the right of reproduction from the tangible times to intangible times. The right to reproduce a copyrighted work is the oldest right of the copyright owner and applies to both musical works and sound recordings [20]. Copyright owners of musical works and sound recordings have the exclusive right to reproduce their works in “phonorecords,” which are “material objects in which sounds . . . are fixed . . . and from which the sounds can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device [21].” A phonorecord can be a vinyl LP, a cassette tape, a compact disc, or a hard drive or floppy diskette containing an MP3 file. These are all tangible objects in which sounds are fixed and from which, given the proper hardware (and, in some cases, software), those sounds can be made audible. The reproduction right generally encompasses making any phonorecord of a copyrighted work.

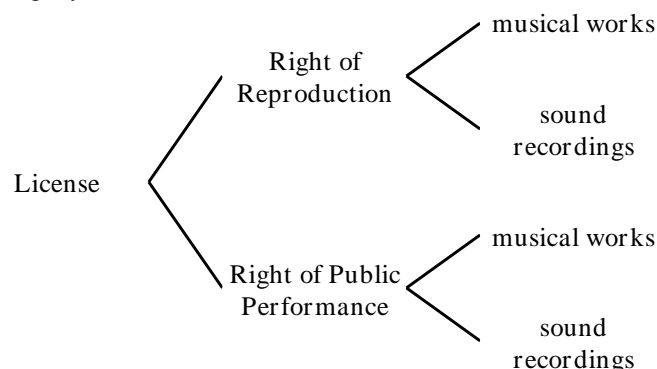
As for the right of reproduction, the “compulsory mechanical license” limits the copyright owner’s exclusive right to make phonorecords of most musical works [22]. Once the owner allows someone to make and sell phonorecords of a musical work, anyone else can make his or her own phonorecords of that work. This requires compliance with certain procedural requirements and paying a fee established by the Copyright Office [23].

2.1.2 “Reproduction” under Intangible Times

To adapt the great changes of digital music world, in 1995, Congress amended the compulsory mechanical license to allow reproducing and distributing musical works by means of “digital phonorecord delivery” (“DPD”). A DPD is a digital transmission of a sound recording that results in a “specifically identifiable reproduction by or for any transmission recipient of a phonorecord [24].” For example, if one connects to Internet and downloads an MP3 file of the song “Fix You,” the certain web site digitally transmits a

sound recording of a performance of “Fix You”. At the end of the transmission that MP3 file is stored on that individual’s hard drive — a phonorecord. Thus, the web site has made a digital phonorecord delivery. If the site has obtained a compulsory mechanical license for the composition “Fix You” and pays the specified royalty rate, then its transmission will not infringe the composition’s copyright. The royalty rate, currently identical to the rate for making and selling a physical compact disc or cassette, is set every two years by a two-step process that encourages voluntary, industry-wide negotiations to establish rates to be adopted by the Copyright Office. If negotiations fail, any interested party can petition the Copyright Office to hold an arbitration proceeding to set the fees [25].

As for the stream music services, the major copyright question is whether every such transmission constitutes not only a public performance of the works transmitted but also a reproduction of those works. The reproduction and performance rights are independent of one another. The statutory language and legislative history contemplate that a single transmission could involve the exercise of both reproduction and public performance rights [26]. Such a transmission occurs where the recipient can both hear the song received and store a copy of it. The more significant aspect of the question is whether every streaming audio transmission reproduces both the musical work and the sound recording transmitted, even if the recipient does not retain any copy of the music at the end of the transmission, as is the case with an ordinary streaming transmission. In cases not involving streaming transmissions, at least two federal appellate courts have held that storing a copyrightable work in RAM constitutes reproduction of the work in violation of the copyright owner’s exclusive reproduction right [27]. Many have criticized these decisions as inconsistent with the statutory language and the legislative history of the Copyright Act [28]. Some lower courts and government officials have, however, adopted this view, suggesting that courts may rule that temporary RAM storage that occurs automatically in the course of every streaming audio transmission constitutes a reproduction of the copyrighted works transmitted [29]. So generally under the current stage, the stream music platforms have to obtain license on rights of the right of reproduction and the right of public performance for musical works and sound recordings respectively. In China, the platforms also have to be licensed with the above rights to run the business legally.



**Figure 1:** The Structure of License under Streaming Music Services

2.2 The Commercial Perspective

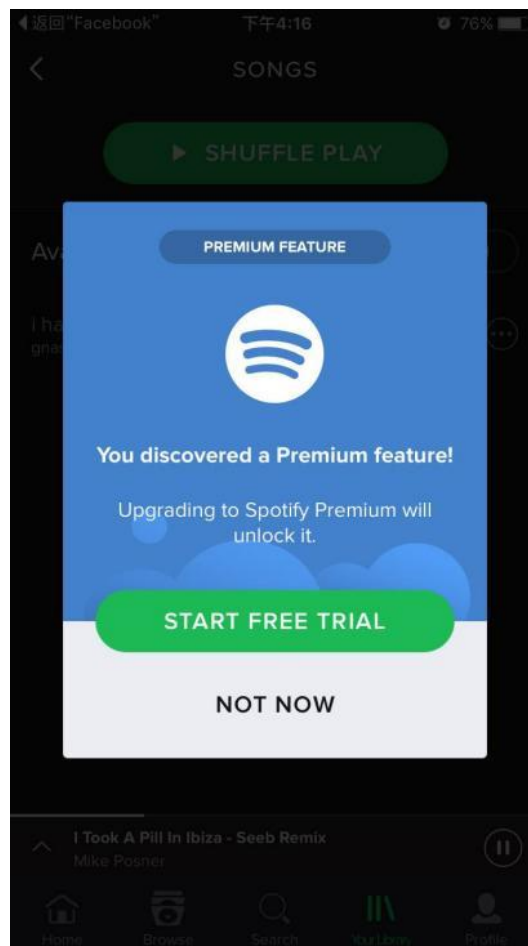
The streaming revenue model currently breaks down into two key segments: paid for subscriptions providing a higher value offering, including full access on mobile devices and absence of advertisements; and advertising-supported streams, providing limited functionality and advertisements [30]. Major and independent record companies have licensed their repertoire to the advertising-supported tiers of streaming services, viewing them as an important way of persuading users to upgrade to premium subscription accounts on services such as the commercial pattern provided by Spotify or Pandora [31].

### 2.2.1 The Commercial Practices in U.S.

The popular commercial pattern of streaming music license around the world is like Spotify business models. From its free tier, free users can only play music in “Shuffle Play”, meaning that one cannot play songs on-demand or offline. They also have limited number of song skips and, of course, they have to listen to ads. For Spotify, its premium tier means its subscription service. Of its 75 million listeners, 20 million of them are paying the \$9.99 monthly. (See below)



**Figure 2:** Shuffle Play Pattern of Spotify



**Figure 3:** Premium Version of Spotify

Comparing to the original Napster, Spotify is not an illegal music service and it pays a large amount of dollars to license songs from all the major record labels. Spotify pays out an average of between \$0.006 and \$0.0084 per stream, across both tiers of service. That may not sound like much, but it adds up quickly. In all, Spotify says that it gives back 70% of its revenue to right holders [32]. The right holders include labels, publishers, distributors, and, through certain digital distributors, independent artists themselves.

### 2.2.2 The Commercial Practices in China

In China, the stream music services also include two tiers: one is for free to enjoy the music with limitation and the other is paid subscription with full functionality. However, until now the supporting advertisements are not quite common in China. Instead, the stream music platforms provide paid-service options based on music qualities or social networking activities. Take NetEase Cloud Music, one of the most successful digital music platforms in China as an example. For its free services, consumers can enjoy a limited number of songs. As showed in Figure 4, the songs in grey are not available for free users due to copyright policy. For its premium services, as showed in Figure 4, consumers can purchase subscription services by month or year. Because the music consumers in China have not established the habit of paying for music, the free users of Chinese stream music platforms enjoy more rights than the U.S. consumers. For examples, the Chinese consumers can skip songs without limitation or enjoy the services without ads.



Figure 4: Free Services of NetEase



Figure 5: Free Services with Limited Functionality of NetEase



Figure 6: Paid subscription of NetEase based on numbers of songs/monthly and qualities (It is equal to \$1.2 for 300 songs per month with special quality and \$1.8 for 500 songs per month)

Several years ago, piracy is one of the most significant issues of Chinese digital music. But in recent years many laws and regulations have been brought by the governments to protect copyright. So the primary goal of steaming music platforms is to direct consumers to legal copyrighted contents and make them get accustomed to paid services step by step. So under the current stage, the platforms invest a large amount of money to get exclusive license within China directly with sound labels and then it is hard to earn profits. It is worth noting that the music platforms in China are usually owned by big Internet companies so the other businesses of the companies can support the music platforms. For example, the Email or the News services of NetEase can support the NetEase Cloud Music to run; or the revenues of QQ Games or Wechat can support the QQ Music businesses because they are all owned under the Tencent Companies. But a sustainable and reasonable license pattern has to be established to promote the development of the music industry.

### 2.3 The Legal Perspective

The streaming music services include two sides of business models: the music platforms obtain license from copyright owners and they also provide access to music libraries to consumers. The formal is a kind of license. Then how should we define the latter business models? And what kind of legal rights involved in this process?

### 2.3.1 The Consumers' Access to Music Libraries Is Defined as To Be Licensed To The Music

For consumers, something is different in the stream music world: If they buy a CD, they can play the CD in any device any time they would like; If they download a MP3 file from web sites, they can run the music in PC, mobiles phones or MP3 players if they want. But for the stream music, you have to be connected to the Internet and then you can enjoy the music. It seems like different from “owing” in the traditional ways. Although categorizing a transaction as a license or a sale may seem like a simple task, courts have taken many different approaches, leading to a lack of settled case law on the issue [33]. Furthermore, the different meanings of the word “license” — depending on context — has led courts and lawyers to conflate the different meanings, further muddying the license-versus-sale debate [34]. In *F.B.T. Productions*, the Ninth Circuit stated that “license,” when used in the “ordinary sense of the word,” means “simply ‘permission to act [35].’” Yet in *Vernor v. Autodesk, Inc.* [36], decided just seven days later, the Ninth Circuit did not provide any definition of “license”; instead, it immediately began reviewing case law to determine whether Autodesk sold or licensed its software to consumers. The Vernor court held that a transaction is a license “where the copyright owner: (1) specifies that the user is granted a license; (2) significantly restricts the user's ability to transfer the software; and (3) imposes notable use restrictions [37].”

The Federal Circuit took an even less formulaic approach in *DSC Communications Corp. v. Pulse Communications, Inc.* In *DSC Communications*, the court looked at all of the circumstances surrounding software transactions to determine if they were licenses or sales [38]. Even though each copy of the software was transferred through a single payment that gave the right to perpetual use and possession, the Federal Circuit held that the transactions were licenses and not sales [39]. In reaching this conclusion, the court examined the agreements transferring the software copies and emphasized the notable restrictions on use and transfer of the software. DSC stands for the proposition that a transaction may not be a sale if the terms of the transaction restrict the rights that owners would typically enjoy — even if it looks like a sale because it involves a single payment for perpetual use and possession [40].

Other courts have taken a more categorical approach, holding that a transferee is not an owner if the terms of the transfer provide that the seller of the copy retains ownership [41]. An even more direct approach that courts have taken is simply holding that if the transaction is labeled a license, the transferee is a licensee and not an owner of the copy. However, the most predominant approach is to examine the terms of the transaction to determine if the transferee has been granted the rights of a licensee or an owner, regardless of whether the transaction is labeled as a license or a sale [42].

When we review the terms “rights we grant to you”, it is not hard to say, their customers just own a limited, non-exclusive, revocable license to make personal, non-commercial, entertainment use of the Content. So the consumers cannot transfer the contents to others as they would like.

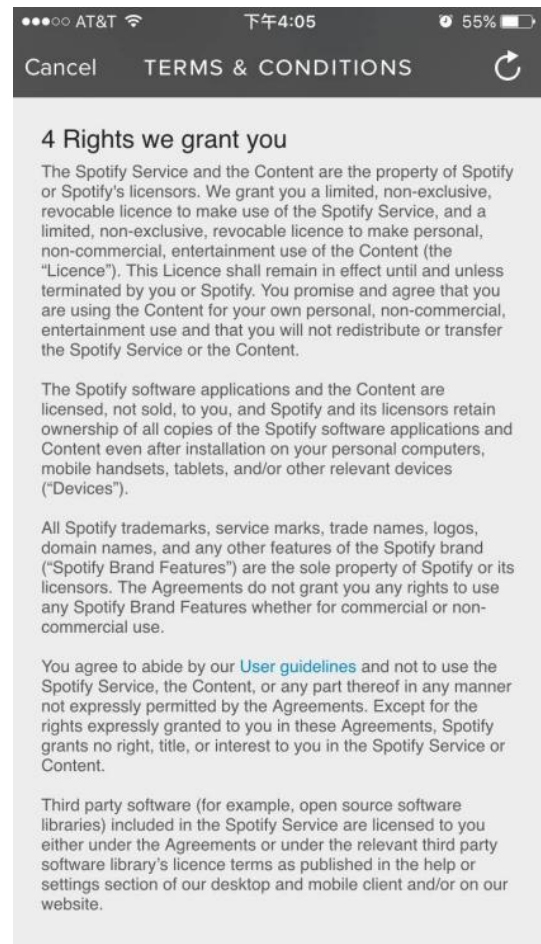


Figure 7: Terms & Conditions of Spotify

### 2.3.2 The Stream Music Platforms Have to Obtain The Right of Public Performance as Well as The Right of Reproduction By License.

As mentioned before, the stream music services constitutes “reproduction” so the platforms have to obtain license of reproduction under 17 U.S.C. § 106. The other important exclusive right relevant to Internet music transmissions is the right to publicly perform a copyrighted work under 17 U.S.C § 106. The Copyright Act defines “performing” a work very broadly, including “to recite, render, play, dance or act the work, either directly or using a device or process [43]. A performance can be public in two ways. First, one “publicly” performs a work by performing it in a public or semi-public place, such as by singing “We can’t stop” in a nightclub. Second, and more important for music on the Internet, transmitting a performance is a public performance if the transmission is “to the public, by means of any device or process, whether the members of the public capable of receiving the performance ... receive it in the same place or in separate places and at the same time or at different times [44].” For example, a radio station’s broadcasting the musical work “You raise me up” constitutes transmitting a performance to the public. Similarly, a web site or app that transmits the recording to users in streaming format publicly performs transmitting a performance to the public. This is true even if each listener is located alone in her own home and only one listener hears the song at any given time. Even if the web site limits its transmissions to subscribing users who pay a monthly fee, its transmissions will be “to the public [45].”

When we look at the issue of license, for the right of public performance on sound recordings, the music platforms obtain licenses from copyright holders because of the Digital Performance in Sound Recording Act of 1995 (DPRA) within the territory of the U.S. The platforms pay royalties to the performers. SoundExchange — the performance rights organization established by the DPRA — distributes the royalty payments directly to performers (45 percent) and to the sound recording copyright owner, most often the record label (50 percent) [46]. The license on musical works are a little complicated. No general compulsory license exists for the public performance right in musical works; to publicly perform such a work requires the permission of the copyright owner.

As evidenced by the popularity of such digital broadcasting services as Pandora and the growth of satellite radio, the digital public performance right has become an increasingly important source of revenue for sound copyright owners and performers.

### 3. What the License Patterns of Streaming Music are and the Main Flaws Under Current Practices

For the today's streaming music platforms, they obtain legal copyrighted works by license agreements. 17 U.S.C § 106 defines the exclusive rights granted to copyright owners. And 17 U.S.C. § 114 and § 115 establish compulsory licensing exceptions to the exclusive rights granted to copyright holders [47]. By amendments, these compulsory licenses have evolved and adapted to changes in technology. And the current music license patterns are generally based on these clauses.

In response to industry-wide fears that the Copyright Act did not sufficiently protect content owners' rights in the face of digitization, Congress amended § 106, § 114, and § 115 by passing the Digital Performance Right in Sound Recordings Act of 1995 (DPRA) and, subsequently, the Digital Millennium Copyright Act of 1998 (DMCA) [48]. The DPRA created complicated categorization criteria for the types of services that would and would not be eligible to license works compulsorily. This system placed streaming music into one of three categories: (1) interactive services; (2) non-interactive, subscription services; and (3) non-interactive, non-subscription digital audio services. Each of these different types of services is accompanied by a different licensing requirement in correspondence with its likelihood and tendency to replace traditional content distribution [49]. Under stream music we discuss, we will focus on the first two types and use Spotify and Pandora as an example respectively.

The distinction between interactive and non-interactive services is meaningful because “non-interactive” digital music services are eligible for “a compulsory or statutory licensing fee set by the Copyright Royalty Board (“CRB”) made up of Copyright Royalty Judges appointed by the Library of Congress,” see *Arista Records, LLC v. Launch Media, Inc.*, 578 F.3d 148, 151 (2d Cir. 2009), whereas interactive services must independently negotiate rates for sound recording licenses [50]. The Congress distinguish these two types of services from each other because of diminution

in record sales in the concern that an interactive service provides a degree of predictability — based on choices made by the user — that approximates the predictability the music listener seeks when purchasing music [51].

#### 3.1 License Patterns for Interactive Services like Spotify

According to 17 U.S.C. § 114(j)(7), an interactive service “enables a member of the public to receive a transmission of a program specially created for the recipient, or on request, a transmission of a particular sound recording, whether or not as part of a program, which is selected by or on behalf of the recipient [52].” The interactive services give a significant amount of control to its users in choosing which songs to play. In *Arista Records, LLC v. Launch Media, Inc.*, 578 F.3d 148, the court held that a webcasting service is interactive under the Digital Millennium Copyright Act of 1998 if a user can either (1) request--and have played--a particular sound recording, or (2) receive a transmission of a program “specially created” for the user [53]. Spotify, Apple Music and Tidal are the classic examples of this type.

Interactive services receive little benefit from the Copyright Act as a result of the DPRA. After its enactment, providers of interactive services were required to obtain authorization from the owner of the sound recording copyright in order to provide access to digital music, due to the substitutability of on-demand digital music for traditional content distribution [54]. The DMCA further expanded the definition of interactive services, increasing the pool of services incapable of obtaining a compulsory license [55]. The various ways Spotify allows its users to play music complicates its licensing scheme. Under this analysis, Spotify's services can be divided into two categories: (1) non-interactive streaming through the Radio program; and (2) interactive streaming together with offline listening.

##### 3.1.1 License for Non-interactive Streaming Services under Spotify

Spotify's Radio “performs” the song publicly through a digital audio transmission as a non-interactive service, and hence it must pay royalties to the copyright owners of the musical work (through PROs), and of the sound recording. Although Spotify has to undergo individual negotiations with the copyright owners of the same works (for reasons explained below), it has chosen this statutory licensing scheme to license the sound recordings played on Radio instead of making a “package deal” in its individual negotiations for both interactive streaming and Radio streaming [56]. This is probably because Spotify is able to pay lower royalties to the owners of sound recording — by paying statutory rates to SoundExchange — than what is provided in its individually negotiated contracts. Current legislation also fully supports the dualism of Spotify's licensing scheme: it expressly states that an interactive service, such as Spotify, may use the statutory licensing scheme for its non-interactive parts despite the fact that the service has separate, interactive features [57]. The blanket licenses Spotify has obtained from PROs for the performance of the underlying musical works, on the other hand, cover both interactive and non-interactive streaming [58].

### 3.1.2 License for Interactive Streaming Services under Spotify

As we mentioned before, although there are some discussions and debates, copyright holders have both right of reproduction as well as right of public performance in practice within stream music services, especially many of them covering offline and interactive streaming services. So such stream music platforms such as Spotify has to consider not only performance rights, but also copyright holders' exclusive distribution and reproduction rights, as provided for in § 106(1) and (3) of the Copyright Act, respectively. We now turn to look at these three rights in connection with the underlying musical works and sound recordings to which they attach.

#### **a. License for the Right of Public Performance of Musical Works and Sound Recordings**

If one would like to perform a musical recording publicly, it must get permission and pay royalties to copyright owners. To implement the license for the right of perform musical works publicly more efficiently, ASCAP (American Society of Composers, Authors, and Publishers), BMI (Broadcast Music, Inc.) and SESAC are established as U.S. performance rights organizations (PROs) to collect publishing royalties (performance royalties) for the public performance of musical works as stipulated by the U.S. *Copyright Act* [59]. These monies are paid to ASCAP, BMI and SESAC for a blanket public performance license that grants the licensee (the business) permission to allow music to be performed in their environment (this includes music over speakers and music performed live by an artist). The license fees paid to ASCAP, BMI and SESAC are passed on to the copyright owners in the musical works (song) — publishers (50%) and songwriters (50%) — as performance royalties for musical works. For Spotify, it generally obtains blanket licenses from PROs for the performance of the musical works [60].

For the right of perform sound recordings publicly, Spotify is not entitled to statutory licensing under § 114 of the Copyright Act, since it is an interactive service. Section 114(d)(3)(C) of the Copyright Act provides that an interactive service must obtain the copyright from a sound recording performance rights society or from the copyright holder [61]. Spotify negotiates with individual record labels to obtain these licenses [62].

#### **b. License for the Right of Reproduction of Musical Works and Sound Recordings**

Second, in order to lawfully and interactively stream songs, Spotify has to acquire the right of reproduction of musical works. This is proscribed under § 115 of the Copyright Act, which establishes a compulsory licensing scheme for copying and distributing phonorecords to which the musical works are fixed, which is defined as the mechanical license [63]. For this kind of license, Judges on the Copyright Royalty Board determine the royalty rates, which differ depending on whether the song is downloaded permanently, temporarily, or merely streamed via an interactive service. The licenses are often obtained not from the copyright holders themselves, but from mechanical licensing agencies, such as the Harry Fox

Agency (HFA), which currently grants the largest percentage of mechanical licenses in the U.S [64] Such agencies also collect royalties and distribute them to copyright holders.

Owners of copyright in sound recordings also have the exclusive right to distribute and copy their works. Therefore, Spotify has to negotiate with copyright owners for these licenses, too. In practice, these negotiations are likely to occur with the negotiations for performance licenses. And there is likely to be a single contract for the payment of royalties for performance, copying, and distribution. The royalty rates are likely to vary from one record label to another, but the general model is as follows: Spotify pays a lump sum when the contract is formed, after which it has access to the recordings of the label, and thereafter it pays per recording played, online or offline [65]. This type of royalty structure could mean that profitable years for Spotify may in fact lie in the future, despite its current trend of incurring higher costs at the beginning of its contract periods.

Some music publishers have also begun to negotiate directly with Spotify for both mechanical licenses and performance licenses [66]. So, instead of having to secure these licenses from two different sources (such as ASCAP and HFA), they tend to reach agreement with stream music platforms directly.

Most of the music platforms in China are like the Spotify patterns, providing non-interactive services by “Radio” and interactive services. Generally, the platforms tend to negotiate with publishers or labels directly to acquire license instead of through PROs. This differences between the U.S. and China is because that the registration for works and copyright management under PROs in China is not sufficient enough to support an efficient license. The songwriters tend to assign their copyright to publisher companies and the publishers run the copyright directly. In addition, the transaction fee through PROs is higher than the publishers or labels running by themselves. So the music platforms tend to negotiate for license with publishers or music labels directly. In February, 2015, QQ Music under Tencent acquired exclusive license of 1.5 million songs within China from Sony for the right of digital audio transmission [67].

### **3.2 License Patterns for Non-Interactive Services like Pandora**

Pandora is a classical example of non-interactive services provider under the DPRA and DMCA. It means that the consumers have little power to decide which music is to be played and it is generally based on a pre-set playlist. Their streaming music services are based non-interactive services and have to get license for the right of public performance. They do not have to consider the right of reproduction under 17 U.S.C. 106(1) and the right of distribution under 17 U.S.C. 106(3). Then the platforms must pay a royalty to both the owners of sound recordings and the owners of the musical works for the right of public performance. So the main issue is how the platforms get the license and how the royalties are determined.

#### **3.2.1 License for the Right of Public Performance of Musical Works**



Under 17 U.S.C § 106(4) the copyright owner has an exclusive right to perform their musical work publicly [68]. To play the musical recordings, the platforms providing non-interactive services like Pandora must pay songwriters and publishers royalties for the songs they play. This happens by paying royalties due first to PROs with whom it has license agreements, and who in turn distribute the money between the songwriters and publishers they each represent [69]. The way is similar to what Spotify does in this field.

### 3.2.2 License for the Right of Public Performance of Sound Recordings

Copyright owners of sound recordings have the exclusive right to perform their work publicly by means of digital audio transmissions [70]. Sound recordings can be licensed under 17 U.S.C. § 114 to establish a statutory licensing scheme for the performance of sound recordings [71]. In order to benefit from the statutory license, a service may not be an interactive one, and the service must comply with the “performance complement [72].” The latter is a qualification, set by the *Copyright Act*, such as limiting the number of songs from the same artist or album. Under Pandora services, one can play within a specified time limit. Therefore, the amount of times a user can skip songs is limited [73]. The rates for sound recordings are overseen by the judges in CRB, and the royalties are paid by the licensees to SoundExchange. SoundExchange is a U.S. PRO established for collecting royalties for digital public performance of sound recordings stipulated by DPRA 1995 and DMCA 1998 [74]. The license fees paid to SoundExchange are passed on to copyright owners in the sound recording (master) — record labels (50%), featured artists (45%), and non-featured artists (i.e. background vocalist, session musicians, etc.) (5%) — as digital statutory royalties for sound recordings [75].

So the next significant issue is how the statutory rates normally determined. First, the rates only apply for non-interactive Internet radio broadcasters [76]. The basis for Internet radio broadcaster royalty rate setting, is the “willing buyer, willing seller” standard, which produces higher rates than the § 801(b) standard for satellite radio broadcasters [77]. Second, the actual determination of royalty rates happens either by negotiation or arbitration [78]. The CRB is involved in both options. The parties (here, Pandora and SoundExchange) may agree on rates through negotiations, and present them to the CRB for adoption [79]. If the judges of the CRB decide to adopt the agreed rates, similarly situated parties are allowed to opt in. In the case that the parties have not reached an agreement, the CRB will implement its power of arbitration to set rates in accordance to the “willing buyer, willing seller” standard [80]. However, the asymmetrical licensing structure for different types of radio has been a point of concern for Pandora, as it sees this as “unfair.” [81] The broadcaster also worries about the CRB judges’ expertise, since they must make royalty rate decisions based on a standard that requires deep understanding of the workings of the music industry.

### 3.3 The Flaws of the Current License Patterns

In the United States, the license patterns for streaming music is comparably mature and maybe they are good options to

balance the interests among various subjects under stream times. But some flaws exist in within the “prosperous” image. And the main issues are lack of transparency and royalties are not fair to artists.

#### 3.3.1 Lack of Transparency

As the songwriters have assigned their copyright to publishers or artists have done the same things to music labels, so the publishers or labels are the main forces in the process of negotiating with music platforms. Nowadays, more and more publishers withdraw their copyrights from PROs and tend to negotiate with the platforms [82]. It is no doubt that this change will bring more flexibility because the negotiation will focus more about the popularity of the artists and the songs.

However, the songwriters and the artists have little power of negotiation in the license process. The tension between the publishers and songwriter are not a new issue for music license. To balance the competing interests between publishers and writers, the ASCAP’s internal rules are premised on equality in decision-making between them [83]. And for the royalties due to license, the publishers and songwriters respectively get 50 percent of them [84]. However, in the process of royalties, the publishers have the decisive power and songwriters or artists usually have insufficient knowledge of the whole process. Many artists just have to power to accept the license royalties in the end. In fact, the publisher are likely to get more than 90% of royalties from the license [85]. So more transparency of the negotiation should be fulfilled to protect the right of knowledge and the interests for songwriters or artists.

#### 3.3.2 The Music Is Not Sufficiently Valued under Streaming Music Services

For this issue, it comprises of two tiers: the one is some people hold that the free subscription services understate the music value and it will harm the development of music industry in long run; the other one is the royalties paid by digital musical platforms is not “fair” for artists. The problem is more serious in China.

##### **a. Controversies on Free Services**

Free services under streaming music have important meanings for the music industry. For a long time, piracy is one of the most significant concerns of digital music. With the development of dissemination and sharing technology, piracy is much easier and at lower costs in cyberspace. Free services of the music platforms direct the consumers to legal copyrighted contents, which has more important meaning in China. In addition, for some independent artists, the free services under streaming music provide them opportunities to promote their songs and make them popular. For the consumers, they are reluctant to purchase the songs of the singers they have no idea about. So the musical platforms provide channels to make consumers get access to these artists and their works.

However, from the nature of music and the nature of copyright, the music should be paid for and only when the songwriters or the artists are awarded sufficiently they have

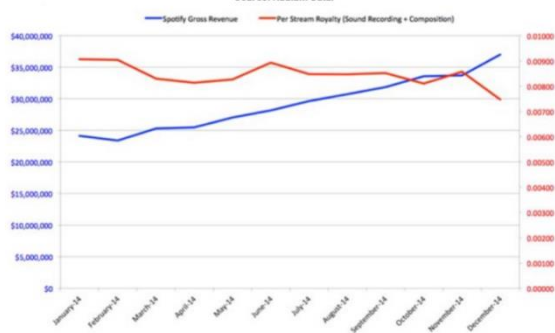
incentives to create more beautiful music. As Taylor Swift said in her open letter, she doesn't think streaming services especially free subscription appropriately values her art. She hoped that the independent artists should also be aware of these facts and not underestimate themselves [86].

### **b. The Royalties Paid to Artists Decrease When Revenues of the Platforms Increase**

Since its inception in 2008, Spotify insists that royalties have been its largest expense, accounting for 70% of revenue and about \$1 billion over a 5-year span. Per stream payments are estimated to be \$0.006 and \$0.0084 with royalty payments for premium subscribers being naturally higher. However, with large overhead costs, the Swedish company is still estimated to gross \$1.2 billion from its 10 million paying subscribers alone. As a result, Spotify has been recently valued at \$8.3 billion [87]. For Pandora, the royalties pays are discriminated between subscriptions and non-subscriptions users. The pay per performance rates are higher for listeners that subscribe to Pandora One premium service. In 2014, performance rates were \$.0014 for non-subscription users and \$.0025 for subscribers [88].

However, it is weird that the more money Spotify makes, the less Artists get paid. In 2014, as Spotify's Gross Revenue, subscribers and music royalty pool went up, the amount artists, songwriters, publishers and labels were paid went down. The amount earned for a sound recording each time it was streamed in 2014 went DOWN -17.39% from \$0.0074199 in January to \$ 0.0061296 in December [89]. (See the Figure below).

**Spotify Gross Revenue vs. Per-Stream Artist Royalties (Premium Accounts)**  
Source: Audiam Data.



**Figure 8: Spotify Gross Revenue vs. Per-Stream Artist Royalties [90]**

The reason for this phenomenon is as follows. The Spotify Premium monthly per-stream rates are calculated by dividing the money in the royalty pot (the Spotify Reported Gross Revenue) by the number of streams in that month [91]. The decrease in the per-stream rate is occurring due to the number of streams per month growing at a more rapid rate than the revenue. In other words, it runs the business model for anyone that pays \$10 a month to get access to unlimited music streams. In addition, as the rates drop, the money is being spread over a larger number of artists causing the money to spread more "thinly" [92].



**Figure 9: How Spotify Pays an Artist [93]**

Based on the above analysis, the main worries of the songwriters or the artists are the royalties are not based on the gross sales of music, but related to many factors including times of streams, revenues of the platforms, the royalty rates set by license agreement. So it may result the phenomenon described above. The commercial pattern of streaming music services is based on the streaming technology in nature instead of the value of the music in nature. That is why more and more artists are not content with the current streaming services. The platforms are developing greatly and the revenues increase year by year while the interests of artists do not increase in turn.

In China, the flaws of the license for streaming music also demonstrate as lack of transparency and insufficient award for songwriters. Besides this, as we mentioned before, the music platforms pursue exclusive license within China and this will push the prices higher than it is really worth. To acquire exclusive license of a music program "Voice of China", Alibaba paid 300 million in total. For the platforms, the price battles of pursuing exclusive license within China makes it harder to earn revenues under current stage, which will harm the sustainable development of streaming music in long run. In addition, this is why some western music platforms are not available in China. Reviewing from the cultural background, a large portion of Chinese people tend to listen to songs in Chinese by the music platforms. What's more, the main music platforms divide the license of the copyrighted songs within China. So it is not worthy investing so large a amount of money for the western platforms to enter the Chinese market.

As an exception, Apple Music is the only western platforms are available in China. Consumers can get access to its services with RMB 10 per month, which is equal to \$1.5. The streaming music services is relied on the Apple's devices, such as iPads, iPhones and iPods. However, it does not develop successfully as expected. For example, Apple Music cannot obtain license of rich Chinese songs as the local platforms. And it is difficult for it to negotiate for license with record labels when the local platforms have obtained the exclusive license within China for at least 3 years. Another problem is the paid subscription under Apple Music is not fit for consumers in China [94]. The main stream of revenues for the local platform are premium services, membership with specialized services or selling digital albums. Although the number of consumers paying for streaming services is becoming larger, paid subscription is not widespread in China. Comparing with 1/3 of paying customers under Spotify, only 1/10 of customers tend to pay for streaming music services in China [95].

#### **4. A Reasonable License Pattern Should be Established to Motivate Fair and Dynamic Competition in Digital Music Industry**

As discussed above, the main flaws of the current license patterns are lack of transparency and insufficient payments to artists. To overcome these flaws, a more voluntary but less compulsory license patterns should be developed. Nowadays, some main music labels withdraw their right of digital audio transmission from PROs and negotiate with the music platforms directly. With mature and reasonable license patterns, fair and dynamic competition then sustainable development should be fulfilled in the music industry.

##### **4.1 License Transparency Should be Fulfilled in the Process of Negotiating**

###### **4.1.1 Artists Themselves Should Participate in The Process of Negotiating If Possible.**

Lack of transparency is the main reason why the copyrights are difficult to become financial benefits. Artists or songwriters have little power in the process of deciding royalties, so they hardly assess and change the compensation for license before signing agreements. Generally, the songwriters have to accept the royalties made by publishers and platforms. The big publisher companies such as Universal, Sony or Warner, have powerful ability to influence the market and almost control the whole process of license. In contrast, the songwriters have little power in negotiating and many of them have little knowledge about the market conditions. Without sufficient transparency, they are almost in the dark [96]. So the songwriters or the artists should participate in the negotiations so that they can have knowledge of the market conditions and reflect their needs timely.

For big artists like Taylor or Adele, they have sufficient ability to influence the negotiation the the final royalties. In fact, they are the value of the music to some extent. Some consumers would like to purchase everything related to Taylor. So they can control the negotiation of license. In addition, the profits they earn by other channels is bigger than achieved from streaming music services. That is why Taylor and Adele could take their songs off Spotify and do not worry about the popularity. Moreover, they are much easier to reflect their needs for compensation with publishers or labels and the latter are willing to listen to them.

For independent or non-featured artists, participating in negotiation is not an easy thing. They are just one of the thousands of artists under a big music labels and the voices about their own benefits are so weak. So measures should be established to promote and guarantee the transparency of negotiation and license. Nowadays, the license via ASCAP and SoundExchange defines how the royalties divide between the publishers or labels and songwriters. However, the division is more in theory than in practice. So external supervision measures by third parties or administrative authorities are needed to achieve this objective.

###### **4.1.2 A Central, Searchable Digital Transmission Rights Database should be established and improved.**

From a dynamic perspective, the issue of transparency should be solved in the process of copyright license and transactions. The dual license for music platforms are divided into two sides, one side is with copyright owners and the other side is with consumers. To promote the transparency of license and encourage the songwriters to create more music, a central distribution agency tasked with administering songwriters' mechanical rights should be established [97]. The HFA is the closest to centralized distribution the music industry has come; however, the agency has yet to achieve total market coverage [98]. Moreover, even when a mechanical rights organization is authorized to license the rights to a given musical work, the licensing process has been described as onerous and lacking transparency [99].

A more sufficient way simplify digital rights licensing might be to require all those who wish to have their music digitally transmitted to catalog their compositions in a single database. This database should be centralized and searchable and include a listing indicating precisely where digital transmission services can obtain each of the licenses required to stream a song [100]. By such a database, the songwriters can obtain sufficient knowledge of his own works and works owned by others so that they can have good command of the market conditions.

A consolidated, independently maintained database that indicated who owned each of the digital transmission rights, how to contact the rights holders, and possibly the rates and uses the rights owners generally deem acceptable would make it significantly easier for on-demand services to stream songs [101]. Given the recent developments in digital and audio recognition software, a database of this nature might be achieved in the short run [102]. It is like the platform of Amazon, but the "goods" for registration and transaction is copyright of music instead of tangible terms.

##### **4.2 Reasonable Royalties Should Be Determined for License of Streaming Music**

###### **4.2.1 How to Define "Reasonable" Is A Significant Issue of License**

The meanings of "reasonable" have different standards from the perspective of various subjects. In re Petitioner of Pandora, the court held that when a rate-setting court determines the reasonable ness of a compulsory licensing fee, fair market value is a hypothetical matter; the appropriate analysis ordinarily seeks to define a rate or range of rates that approximates the rates that would be set in a competitive market. And it is often facilitated by the use of a benchmark, i.e., reasoning by analogy to an agreement reached after arm's length negotiation between similarly situated parties [103].

Generally, Fair Market Value (FMV) is one of the most important benchmark to determine the royalties under license. It is usually equivalent to the value at which a willing and unrelated buyer would agree to buy and a willing and unrelated seller would agree to sell ... When neither party is compelled to act, and when both parties have reasonable knowledge of the relevant available information [104]... Neither party being compelled to act suggests a time-frame context — that is, the time frame for the parties to identify and

negotiate with each other is such that, whatever it happens to be, it does not affect the price at which a transaction would take place [105]...The definition also indicates the importance of the availability of information — that is, the value is based on an information set that is assumed to contain all relevant and available information [106].

Comparing with the traditional license patterns, the royalties under streaming music are influenced by many factors. The musical platforms pay a lump sum to get the permission to run the songs in the beginning and pay for the copyright owners by a pre-setting rate per play with times of streams. As mentioned before, under the current license patterns, the royalties obtained by artists decrease when revenues of the platforms increase. A possible alternative business model may be to pay for the specific streams on a more direct basis. That is, if someone pays \$10 a month, and only streams songs from the album *Broken Boy Soldiers* by the band *The Ranconteurs*, the money from these streams would only be paid for the use of these songs and not impact or dilute the royalties to another rights holder [107]. The digital albums under Chinese streaming music platforms are like this. The consumers get access to the songs of a certain artist. It is more targeted and greatly welcomed by consumers. In December 2014, a famous Chinese artist, Jay Chou “sold” his digital album on the QQ Music with RMB 20 per piece [108]. It is hot among music fans and developed a new method for promoting revenues for the artists.

4.2.2 “One-Stop” Digital Rights Licensing Platforms should be established.

Under the current license patterns, the platforms have to obtain license from different copyright owners for license of musical works and sound recordings respectively. This model increases the transaction and communication costs. The Copyright office and several public interest institutes have called for the creation of organizations that would have the sole authority to provide the licenses necessary for downloads, streams, and other digital transmissions [109]. According to the Copyright Office, these ministering rights organizations (MROs), would be a “one-stop shopping” venue for on-demand song streaming services [110]. MROs would operate, in theory, much like the current PROs, but with an expanded role. In their comprehensive study on modern digital rights licensing, the public interest institute, Public Knowledge, has gone so far as to draft what the legislation might look like should Congress consider authorizing the creation of such organizations or platforms [111].

In the time since the Copyright Office presented its MRO outline to Congress, an ever increasing number of start-up digital rights management organizations have infiltrated the music industry [112]. These agencies have capitalized on the complexity of the current digital transmissions right licensing landscape by contracting with artist and songwriters to collect all of the digital rights related royalties owed to them. Basically, these organizations operate by contacting the PROs, the HFA, and other global collection organizations on behalf of independent artists and songwriters, informing the organizations that those artists and songwriters want the organizations to administer their digital transmission rights, collecting royalties checks from each of these organizations,

and paying the royalties to the artists and songwriters [113].

## 5. Conclusion

From the innovations and trials of the streaming music industry, a more “voluntary” but “less statutory” licensing patterns should be established in the stream music world. Streaming services is the booming trend for enjoying music for music fans around the world. The current license patterns are based on the technological features of streaming and the current statutory framework. However, more and more artists are not content with the current license patterns because their works are not sufficiently valued especially under the free subscriptions tiers. The license of streaming music should reflect the needs of independent creators [114], encourage the growth of legitimate, licensed services [115], provide flexibility, control, and accessibility for artists [116], and coexist with streamlined database and licensing structures [117].

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- [81] *See* Tom Pakinkis, *Pandora tells Congress: internet royalties are "unfair and indefensible"*, MUSICWEEK, <http://www.musicweek.com/news/read/pandora-tells-congress-internet-royalties-are-unfair-and-indefensible/052727>, last visited April 16, 2023.
- [82] *In re Pandora Media, Inc.*, 6 F. Supp. 3d 317, 318 (S.D.N.Y. 2014).
- [83] *Id.*
- [84] *See What's the difference between ASCAP, BMI, SESAC and SoundExchange?* THE DIY MUSICIAN, <http://diymusician.cdbaby.com/musician-tips/the-difference-between-ascap-bmi-sesac-and-soundexchange/>, last visited April 15, 2023.
- [85] *See* Pierre-E. Lalonde, *Study Concerning Fair Compensation for Musical Creators in the Digital Age* (2014).
- [86] *See* Jack Linshi, *Here's Why Taylor Swift Pulled Her Music From Spotify*, TIME, <http://time.com/3554468/why-taylor-swift-spotify/>, last visited March 13, 2023.
- [87] *See* Trevir Nath, *How Pandora And Spotify Pay Artists*, INVESTOPEDIA, <http://www.investopedia.com/articles/personal-finance/121614/how-pandora-and-spotify-pay-artists.asp>, last visited April 25, 2023.
- [88] *Id.*
- [89] *See* Jeff Price, *The More Money Spotify Makes, the Less Artists get paid...*, DIGITALMUSICNEWS, <http://www.digitalmusicnews.com/2015/06/11/the-more-money-spotify-makes-the-less-artists-get-paid/>, last visited April 25, 2023.
- [90] *Id.*
- [91] *Id.*
- [92] *Id.*
- [93] *See Spotify.*
- [94] *See* *Apple Music Come Across Difficulties When Entering China and The Road for Localization Faces Dilemma*, QQ TECH, <http://tech.qq.com/original/tmtdecode/t1034.html>, last visited April 28, 2023.
- [95] *See* 2015 *Chinese Music Consumers Report*, 199IT, <http://www.199it.com/archives/445795.html>, last visited April 20, 2023.
- [96] *See* Pierre-E. Lalonde, *Study Concerning Fair Compensation for Musical Creators in the Digital Age* (2014).
- [97] *See* Public Knowledge Report, *supra* note 54, at 8-9.
- [98] *See* Public Knowledge Report, *supra* note 54, at 8.
- [99] For example, licensees have complained that these organizations (probably at the request of the songwriters who use them) do not require a standard form license, and instead require any potential licensee to submit an application describing its intended use of the license. There is also no time limit for the process and neither the organizations nor the songwriters need explain why they choose to deny request. *See Cardi*, *supra* note 13, at 841-45.
- [100] *See* Rick Marshall, OH MERCY: HOW ON-DEMAND INTERACTIVE STREAMING SERVICES NAVIGATE THE DIGITAL MUSIC RIGHTS LICENSING LANDSCAPE, 13 U. Den. Sports & Ent. L.J. 23.
- [101] *Id.*
- [102] *See* e.g. SoundHound and Shazam, which are examples of companies that have recently made significant developments in Sound to Sound (S2S) acoustic fingerprint recognition technology.
- [103] *See In re Pandora Media, Inc.*, 6 F. Supp. 3d 317, 318 (S.D.N.Y. 2014)
- [104] *Id.*
- [105] *Id.*
- [106] *Id.*
- [107] *See* Jeff Price, *The More Money Spotify Makes, the Less Artists get paid...*, DIGITALMUSICNEWS, <http://www.digitalmusicnews.com/2015/06/11/the-more-money-spotify-makes-the-less-artists-get-paid/>, last visited April 25, 2016.
- [108] Danlin He, *Jay Chou Began to Sell Digital Albums*, JIEMIAN, <http://www.jiemian.com/article/214358.html>, last visited April 25, 2016.
- [109] *See* Licensing Reform Statement, *supra* note 117.
- [110] *Id.*
- [111] *See* Public Knowledge Report, *supra* note 54, at 8-9, 21-27.
- [112] *See* e.g. TuneCore, The Music Bridge, GreenLight.
- [113] *See* e.g., SONGTRUST, <http://www.songtrust.com/>, last visited April 26, 2016.
- [114] *See* David Dante Troutt, *I Own Therefore I Am: Copyright, Personality, and Soul Music in the Digital Commons*, 20 Fordham Intell. Prop. Media & Ent. L.J. 373, 435-52 (2010)
- [115] *See* Aric Jacover, Note, *I Want My Mp3! Creating A Legal and Practical Scheme to Combat Copyright Infringement on Peer-to-Peer Internet Applications*, 90 Geo. L.J. 2207, 2247 (2002)
- [116] *See* Troutt, *supra* note 250, at 435.
- [117] *Music Licensing Before the Subcomm. on Courts, the Internet, and Intellectual Property of the Comm. on House Judiciary*, 109th Cong. (2006)