

## CASE TRANSLATION: DENMARK

CASE CITATION:

**Poul Erik Gravgaard Larsen v IFPI  
Denmark, Case 27/2009**

NAME AND LEVEL OF COURT:

**Højesterets Dom (Supreme Court)**

DATE OF DECISION: **Thursday 24 March 2011**

MEMBERS OF THE COURT: **Asbjørn Jensen,  
Poul Søgaard, Jytte Scharling, Vibeke Ronne  
and Henrik Waaben**

LAWYER FOR THE APPELLANT:

**advocat Per Overbeck**

LAWYER FOR THE APPELLANT:

**advocat Henrik Chrstrup**

*Illegal filesharing of music over the internet;  
assessment of digital evidence*

SUPREME JUDICIAL COURT

delivered on Thursday 24 March 2011

Case 27/2009

(Section 2)

Poul Erik Gravgaard Larsen  
(advocat Per Overbeck, appointed)

v

IFPI Denmark acting on behalf of  
Aller International A/S,  
Art Management ApS,  
ArtPeople A/S,  
Bellevue Entertainment A/S,  
Bonnier Music Denmark A/S,  
Circle Records A/S,  
COPE Records ApS,  
Crunchy Frog ApS,  
Da Capo Records,  
Egmont Litas A/S,  
EMI Music Denmark A/S,  
Exlibris Music Gyldendal A/S,  
Flex Records ApS,  
Folkeskolens Musiklærerforenings Forlag,  
Forlaget GUF v/Jan Østergaard Nielsen,  
Hammock Music Group ApS,  
Intermusic v/Hans Jørgen Henriksen,  
Kick Music A/S,

MBO Group A/S,  
Music for Dreams v/Kenneth Bager,  
Now Music I/S,  
OH Musik ApS,  
Olga Musik ApS,  
Peter Olufsen,  
Playground Music Denmark A/S,  
RecArt Music ApS,  
Sand ApS,  
SonyBMG A/S,  
Spin.dk ApS,  
SteepleChase Productions ApS,  
Sundance ApS,  
TUBA Entertainment v/Jerry Ritz Blom,  
Tutl,  
Universal Music Group A/S,  
Voices Music & Entertainment Denmark ApS and  
Warner Music Denmark A/S  
And  
Nordisk Copyright Bureau  
Dansk Musiker Forbund and  
Dansk Artist Forbund

(advocat Henrik Chrstrup for all)

In previous bodies are ruled by the Court in Aalborg  
on 12 February 2007 and the Western High Court 7th  
Department on 20 October 2008.

In judgment five judges attended: Asbjørn Jensen,  
Poul Søgaard, Jytte Scharling, Vibeke Ronne and  
Henrik Waaben.

Claims

The appellant, Poul Erik Gravgaard Larsen, reiterated

his claim to be acquitted of the action, and the alternative claim for payment of a small amount. In relation to the statement on deleting recordings, Poul Erik Gravgaard Larsen claimed to be acquitted. The defendants, IFPI Denmark acting on behalf of Aller International A/S and others, Nordic Copyright Bureau, the Danish Musicians' Union and the Danish Artist Union, have reiterated their claims, on payment they alternatively alleged payment of a smaller amount.

### Pleas

Poul Erik Gravgaard Larsen stated in particular:

#### Question of proof

The defendants have not discharged the burden of proving that he has violated their copyright. The defendants merely refers to computer-generated evidence that has not undergone any type of manual control. Furthermore, there is no explanation of the relationship between individual documents. Regarding Annex 2, an explanation of how and when the flag at the bottom of the second document of alias and IP address is made is missing. It is also important that the screen shots were neither substantiated by a witness or at least making random checks for its actual content.

For the rights holders to make a claim for damages, they should use the rules of evidence set out in the Judicial Code Chapter 57 a. When a party chooses to base his claims on other grounds, a higher standard of evidence should be required, however, the respondents' evidence falls short of this.

The monitoring system for file sharing activities for music on the internet can perhaps identify an IP address with high probability, but cannot identify the natural person who is behind a particular transaction, or whether the use of the IP address has even involved the person's computer or other technical equipment. The right holders have made it probable that some data traffic might be from Poul Erik Gravgaard Larsen's IP address, but it has not been demonstrated that his computer or other equipment was involved. Estimates by the expert's declaration and his own testimony can be taken to mean that intruders may have used the computer's wireless device to gain access to the computer.

In the opinion of engineer Michael Hansen, he estimated that it would take a total of approximately 2.8 years to upload 2 copies of the 13,181 sound recordings. It is so great a time frame that the right holders' hypothesis that he is only on the internet for 5 minutes on 2 September 2005 and made available over 13,000 musical works for others should be dismissed as impossible.

It is also not proven that the tracks referred to – if it is music – is accessible to the public and published in violation of the Copyright Act, and it is not proven that music tracks were downloaded by someone.

#### Basis for liability

An action in negligence has not been shown, nor does it otherwise show that he may be responsible for others' possible abuse of his internet access or IP address. He did not know nor ought to have known what the Direct Connect program, which was accessible to anyone on the net, entailed.

#### Remuneration and compensation

There is in this case no basis to order him to pay remuneration and compensation. The respondents have not even indicated that it was likely that they have suffered losses. In particular, regarding compensation, under Danish law there is no basis for calculating this on the "double-up principle". The injured party must at least make plausible his loss, as evidenced by the drafting of the Copyright Act § 83 (Folketingstidende 2005-06, Appendix A, L 48, p. 1364 ff.).

Because Annex 15 contains numerous double registrations, this annex does not form the basis for calculating remuneration. There is thus no less than 647 musical items, which are included more than once. Furthermore, there is no basis to charge a fee of 10 kr. per item of music.

It also must be taken into account that he has not independently developed and made public a refined system on-line, but only briefly and as an unskilled user uses a file-sharing system, and denies that he should have obtained large amounts of data and made them accessible to the public.

The respondents have also not made probable losses

in terms of controlling costs or market disruptions. They have not, for example, presented figures that can illustrate a decline in sales, or sought to demonstrate the relationship illustrated by the party or witness statement. Furthermore, the control expenses are not illuminated in any way.

Any liability should be abolished or relaxed significantly under the Damages Act § 24, especially since he is employed with regular income.

#### Erasing recordings

There is no evidence that the data contained in Annex 15 have been or are to be found on his computer, although it is assumed there is no evidence that all files in the list refers to infringing copies of sound recordings and that they can be ordered to be deleted.

Moreover, he cannot satisfy such a verdict, since he has not been in possession of these recordings, the execution by a bailiff in that connection is impractical.

IFPI Denmark acting on behalf of Aller International A/S and others, and Nordisk Copyright Bureau, the Danish Musicians' Union and the Danish Artist Union states, in particular:

#### Question of proof

Annexes 1 and 2 are computer-generated uninfluenced by human hand. With reference to these documents, surveys and the expert's statement and Poul Erik Gravgaard Larsen's explanation, it must be assumed that the number of musical works as shown in Annex 15 were on his computer. There was no playback of the files, but the term covers Mp3 music files. While the list of music in Annex 2 may contain more than audio files, Annex 15 only includes audio files over 3 MB in size. Annexes may be the basis for the proceedings, and when one compares them with the other evidence in the case, this has an equally definite proof as that could be provided by a procedure under the Administration of Justice Chapter 57 a.

After Poul Erik Gravgaard Larsen's explanation, it can also be assumed that only he had access to the computer and that it was not connected to a wireless

network. It is therefore irrelevant in this case that the IP address cannot identify who carried out the violation. The violations occurred on the IP address that belongs to him. It is also after the statement of the expert witness, Peter Kruse, and his answer to the questions demonstrated that Poul Erik Gravgaard Larsen's computer had not been abused.

Poul Erik Gravgaard Larsen himself also explained that he agreed with the Direct Connect network. The works that were on his computer were made available to other users in that hub (central) in the Direct Connect network. The file list downloaded by the program DCAGENT is evidence of the musical works that he added to his hard drive on 2 September 2005, which he at that time made available in violation of the Copyright Act § 2.

#### Basis of liability

There is a strict liability for negligence or, alternatively, negligence with the burden of proof.

Poul Erik Gravgaard Larsen is particularly subject to an enhanced liability for fault because he used a computer connected to the DC network, which involves a particular risk for rights holders.

Even with a reduced threshold for negligence Poul Erik Gravgaard Larsen is responsible, since he did not familiarize himself with the particular function of the Direct Connect network.

#### Remuneration and compensation

The requirement for payment of DKK 200,000 is distributed with DKK 100,000 as remuneration and DKK 100,000 as compensation.

The royalty shall be estimated, based on the principles stated in the letter dated 16 December 2005 to Poul Erik Gravgaard Larsen. It must be emphasized that he acted unlawfully, and on the principle of the Goods Act § 5, as his conduct is tantamount to a forced sale of copyright. They also refer to Western High Court ruling in the Journal of Justice p. 2001 of 1572.

The rights holders are entitled to compensation for further damages inflicted on them. It appears from

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the Copyright Act § 83, that compensation is set after a full assessment of all relevant elements, possibly by discretion, for which see Folketingstidende 2005-06, Appendix A, L 48, p. 1373.

Injury – or loss – may include market disruption costs associated with finding copyright violations and the internal costs of right holders.

Tenders and downloads of the right holders' works inflict injury on the right holders in the form of market disruptions, and the controlling of these problem, etc. The rights holders are using a significant part of their economic resources to market music in different media and platforms. File sharing systems such as Direct Connect draw undue advantage of the licensees' marketing. In addition to lost sales and damages, the actions of Poul Erik Gravgaard Larsen act against the long term value of licensees' products, because music buyers' interest in paying for music will disappear as the utilities are offered for free download, as in the example of the Direct Connect network. In this way, the wrongful acts of Poul Erik Gravgaard Larsen contributes to competing with the legitimate music services, and thus destroys the possibility of developing a sustainable market for music on the internet.

Right holders use significant financial resources to monitor the internet in order to limit unauthorized copying and the provision of their products. This monitoring and control is general and therefore cannot be calculated in relation to each case.

These losses are by their nature extremely difficult to document and must therefore be estimated, and it must be borne in mind that it is Poul Erik Gravgaard Larsen, who by his own conduct, has prompted the damage, and consequently he should not subsequently claim that the damage is difficult to document. In addition, copyright law violations in most cases will be hidden from the victim.

The evidence of loss resulting from the character of the breach of law is difficult to obtain, which means the amount of compensation must be determined by discretion. Within the ambit of the Copyright Act § 83 there are a large number of unlawful acts, therefore technical and procedural terms speak for the losses – unless specific operational conditions make it

inappropriate – to be defined as a standard amount in relation to the remuneration rights holders have missed. To lay down the compensation for the same amount as the fee seems to provide reasonable and practical results. A solid case for calculating the compensation after this model has also been formed. Refer to support of it in Western High Court judgments in the Journal of Justice 2001 p. 1572 and 2005, p. 60, and the principle is also applied in city court practice.

It is not reasonable to reduce liability under the Damages Act § 24 because Poul Erik Gravgaard Larsen acted improperly and caused the right holders losses which they have not been able to avert. In addition, information about his income and assets has not been provided, so it is not possible to determine whether liability would be particularly burdensome for him.

### Erasing recordings

In the absence in this case of special circumstances which provides a justification to Poul Erik Gravgaard Larsen for not deleting any of the audio recordings as alleged, see the Copyright Act § 84.

### Additional facts

The specially developed program, DCAgent, mentioned in the city court ruling in this case produced a log in the control of the IP address 80.161.102.49 (Appendix 1). It appears as follows:

“[DK][BB]pegl - 80.161.102.49.log

Time has been synchronized with time server: ntpsl-1.cs.tu-berlin.de

Date and time are displayed in this format:

DD/MM/YYYY HH:MM:SS.MS

02/09/2005, 14:02:38.049 – (GMT+01:00) Brussels, Copenhagen, Madrid, Paris

Start downloading files

=====

Download start: 02/09/2005, 14:02:38.049 –  
(GMT+01:00) Brussels, Copenhagen, Madrid, Paris

User name: [DK][BB]pegl

User IP: 80.161.102.49

User nationality: DK

Connected to hub IP: 80.197.139.12

Filename: MyList.Dclst

Filesize: 614202 Bytes

Download end: 02/09/2005, 14:10:06.049 –  
(GMT+01:00) Brussels, Copenhagen, Madrid, Paris

=====

Download start: 02/09/2005, 14:10:12.049 –  
(GMT+01:00) Brussels, Copenhagen, Madrid, Paris

User name: [DK][BB]pegl

User IP: 80.161.102.49

User nationality: DK

Connected to hub IP: 80.197.139.12

Filename: True Love Ways.MP3

Filesize: 2752908 Bytes

Download end: 02/09/2005, 14:39:37.049 –  
(GMT+01:00) Brussels, Copenhagen, Madrid, Paris

=====

Download start: 02/09/2005, 14:39:43.049 –  
(GMT+01:00) Brussels, Copenhagen, Madrid, Paris

User name: [DK][BB]pegl

User IP: 80.161.102.49

User nationality: DK

Connected to hub IP: 80.197.139.12

Filename: That, ll Be The Day.MP3

Filesize: 2233802 Bytes”

At Annex 2, the respondent submitted an undated file list of 339 pages. Page 1 of this list appears as follows:

“MP3

Buddy Holly

- Wishing.MP3|2001835
- True Love Ways.MP3|2752908
- Think It Over.MP3|1720130
- That’ll Be The Day.MP3|2233802
- Rave On.MP3|1789512
- Peggy Sue.MP3|2450723
- Peggy Sue Got Married.MP3|2018971
- Oh Boy.MP3|2086681
- Maybe Baby.MP3|1987206
- Listen To Me.MP3|2308617
- It Doesn’t Matter Anymore.MP3|2017299
- Heartbeat.MP3|2110504
- Early In The Morning.MP3|2109668
- Brown Eyed Handsome Man.MP3|2039033
- Bo Diddley.MP3|2284793
- Baby I Don’t Care.MP3|1584294

Blackfoot

- Blackfoot – Rattlesnake Rock ‘n’ Roll-The Best of Blackfoot folder.jpg|12989
- 18. Guitar Slingers Song and Dance.mp3|5297692
- 17. Doin’ My Job.mp3|3897911
- 16. Trouble In Mind (Live) .mp3|1867903
- 15. Road Fever (Live) .mp3|5871524
- 14. Good Morning (Live) .mp3|3734503
- 13. Rattlesnake Rock ‘N’ Roller.mp3|3957291
- 12. Fly Away.mp3|2940776
- 11. Too Hard To Handle.mp3|3989874
- 10. Diary of A Workingman.mp3|5464023
- 09. Fox Chase.mp3|4266545
- 08. Spendin’ Cabbage.mp3|3223333
- 07. Every Man Should Know (Queenie) .mp3|3657204
- 06. Gimme, Gimme, Gimme .mp3|3989876
- 05. Highway Song.mp3|7287019
- 04. Train, Train.mp3|3502817

- 03. Wishing Well.mp3|3131251
- 02. Left Turn On A Red Light.mp3|4491302
- 01. Feelin' Good.mp3|2735862

Blackfoot – No Reservations

- Blackfoot – No Reservations.m3ul202
- Blackfoot – No Reservations, front.jpg|471306
- Blackfoot – No Reservations, back.jpg|163871
- 09. Railroad Man.mp3|2875402
- 08. I Stand Alone.mp3|15483558
- 07. Big Wheels.mp3|10363555
- 06. Take A Train.mp3|8935808
- 05. Born To Rock & Roll.mp3|7452060
- 04. Not Another Maker.mp3|10475575
- 03. Stars.mp3|8469359
- 02. Indian World.mp3|6129630
- 01. Railroad Man.mp3|5134887

Blackfoot – Highway Song – Live

- Blackfoot – Highway Song, front.jpg|424511
- Blackfoot – Highway Song, back.jpg|478131
- Blackfoot – Highway Song – Live.m3ul271
- 11. Howay The Lads.mp3|2371228
- 10. Highway Song.mp3|17331657
- 09. Train, Train.mp3|11571342

\\172.29.12.12\data\5 bølge\[dk][bb]pegl - 80.161.102.49\[dk][bb]pegl - 80.161.102.49.dcl”

The bottom line is repeated on all subsequent pages of the Annex.

On 18 December 2006, the defendants devised a new file list of 268 pages (Annex 15). It follows in particular:

“Date: 18/12/2006

Time: 12:0:26

#####

# These are the minimum and maximum interval for file formats used by this log  
 audio: Minimum Size = 3 MB / Maximum Size = 10 MB  
 video: Minimum Size = 300 MB / Maximum Size = 9999 MB

#####

audio files

\*\*\*\*\*

.mp3

\*\*\*\*\*”

In the defendants’ summons dated 7 August 2006 the following are stated amongst other things:

“The first box in the log file, see Annex 1, shows the program downloads from the user “[GB][BB] Pegl” file list, as shown by the file name “MyList.dlist”. The next 2 boxes document the DCagents test downloads of recordings of filenames “True Love Ways.mp3” and “That’ll Be The Day.mp3”.

Finally, as shown in Annex 1 all downloads are made from the same user, “[DK][BB] Pegl” and using the same IP address 80.161.102.49.”

In the respondents rejoinder of 12 September 2007 to the High Court, they stated amongst other things:

“Appendix 2 is the file list, which was originally downloaded from the appellant, and Annex 15 is a list that has subsequently been prepared exclusively for the purpose of making the deletions claim executable, since by Annex 15 gave an overview the bailiffs could use.

There is no complete agreement between the two Annexes. This is because when Annex 15 was created, files that filled more than 3 MB were not included. The reason for this is that the program that sorted the files had been encoded so that it deleted files that are smaller than 3 MB, since such files are often not of musical works, but other types of files that the peers are trying to cheat the other users to obtain access to share music and films with them in so-called hubs. The explanation is that several hubs require very large amounts of data to allow access to them.

The first titles to appear in Annex 2 of the artist “Buddy Holly” where the greatest element is less

than 3 MB, are therefore not included in Annex [15]. It is noted that this is probably because the songs were shorter when Buddy Holly recorded them, and that it does not in itself say anything about the quality. It will also appear below under “Question 19” that this does not reflect that there are no tracks. Two Buddy Holly songs are downloaded and presented as the Appendix 18 on CD – the sound files “The will be the day” and “Tru Love Ways” with and by Buddy Holly, and were the two numbers that the respondent consultant downloaded from the appellant, see the Annex 1 and Annex 2.”

The respondents reported that Thomas Sehested was liable for evidence of the available evidence case. Thomas Sehested on 12 September 2007 issued a declaration stating that the software used in this case is similar to the one used in January 2005 in a case of Evidence for the Bailiff’s Court in Hillerød.

Poul Erik Gravgaard Larsen presented specifications on its computer to the Supreme Court. It follows in particular that it can be connected to a wireless network.

Print outs from the web sites of Bilka, iTunes and TDC Onlines are submitted with prices 11.95 kr and 8 kr for the purchase of a track over the internet (by downloading).

Peter Kruse, a Partner and IT security specialist at CSIS Security Group, submitted as an expert written comments and answered a discretionary issue for the Supreme Court.

In its written comments of 24 September 2009, Peter Kruse stated:

“The first thing I note is that the right holders at no point in the process had ensured that the PC (supposedly a Medion PC bought in Aldi) which is used as a server for file sharing, had been examined physically. In forensic/incident handling, it is always necessary to gather all available evidence, for example by providing an image (backup) of all the data on the machine as close to the time as possible when the unlawful act is thought to have occurred. In particular, an image could secure the digital evidence that must necessarily be on that machine. In this case, it is necessary to consider

whether the file-sharing application (Direct Connect), also known as DC, or any other applications were installed with or without the defendant’s knowledge or consent, including malicious code.

The defendant, according to the submitted file, used the alias “PEGL” with a reference to DK.

That PC was, as stated in the papers, was connected to the internet on a permanent connection (modem). There is thus a direct connection to the network that assigns a public IP address. This indicated the IP address 80.161.102.49 and belongs to a static pool with TDC.

It is stated further that there an unspecified wireless hardware device was connected. Such a device might be misused to connect the machine to an unsecure wireless router without the user’s knowledge, but this appears highly unlikely, since the logs correctly identifies the IP address that was issued to the defendant by TDC.

There was, according to the material delivered, an antivirus program installed that was used in the period when file sharing occurred. Provided that this anti-virus solution has been up-dated, this limits the risk of malicious and unwanted software, and particularly in 2003 when anti-virus programs had a significantly higher detection rate than today. This speaks to some degree against the defendant who was not aware of the possible presence of malicious code that could have abused his file-sharing software without his knowledge or consent.

I find it proved on the basis of the material handed out that file sharing has taken place from that IP address. This is a public IP address, not an IP address in a local network. I find it proven that the PC has been connected directly to the network and had shared the files in question, which appears in the extradited extract.

I have carefully scrutinized the material delivered, and I am obviously very aware that a copy (image) of the machine was not secured to explore it for viruses, worms or Trojan horses – also known as malware, which is a generic term for unwanted software. It cannot be excluded that material can be

shared without the defendant's knowledge, but the striking point about this theory is that in this case a large number of file names on the machine indicating material of Danish descent would not appear. A worm for example, would not in 2003 be able to create so many files and so many specific titles that I consider it unlikely that it may have occurred without the defendant's knowledge.

Another theory is that a foreign person, using a Trojan horse, may have uploaded the extensive amount of files and data to the defendant's machine. I also find this theory unlikely, since several cases must be present to substantiate this theory. First, the person, with control over the defendant's machine must have an interest in providing data and files, including many Danish titles via the defendant's computer. Secondly to upload the large quantity of files to a machine via an internet connection, as documented in the material, would take several days or weeks, and therefore would not give the person with the remote machine an obvious advantage of performing such an action.

The conclusion of the voluminous file, which I have analyzed, which is the basis for my assessment, is that it technically cannot be excluded that there may be performed acts and materials made available to the defendant's machine without his knowledge or consent, but I find it is very unlikely that this would be the case."

According to the set of questions presented to the expert Peter Kruse, he replied as follows:

*"1) Does the use of "Direct Connect" increase the risk of getting a computer virus (defined by Mads Bryde Andersen 'IT law' 2nd edition, København 2005, as a "Program, which – typically with the intent to harm or harass – is designed to unfold its functions without IT user knowledge") and if such a virus is used is it possible that an unauthorized person can obtain access to the infected computer?*

1. The client Direct Connect (DC) is not in itself a greater risk than other programs you install on the PC. But the nature of file sharing, where computer criminals can potentially share poisoned share software with others and thus deliver such a Trojan horse, is higher in networks of this type, since the

content is based only on what each file dividers want to make available to others. People with bad intentions can offer software that purports to be one thing, but is something else entirely (Trojan horse). It should be noted in this context that the defendants in the material made available to the undersigned, solely shared not binary content (mainly music in MP3 format) and this kind of files can, technically speaking, only in very limited cases be harmful.

*2) Is it true that the DC program, to facilitate file sharing, opens a "gate" to the user's computer and it is possible for a "hacker" (defined in Mads Bryde Andersen 'IT law' as a person who "tries to gain unauthorized access to an IT-system"), to abuse this "door" or opening?*

2. It is true that for file-sharing programs to communicate with the network and each other, it opens a port on the machine where it is installed.

The port functions as a kind of communication channel between the machine that uses the file-sharing program and other machines which are downloading or sharing files at the same time. It is unlikely that a port in this context could be misused to climb in and modify the contents of the defendant's computer without the defendant making a human mistake when he installed the application, which could give expanded rights to read and write on the defendant's PC.

*3) The witness is asked to describe and explain the technical term "port", and how this is applied in practice.<sup>1</sup>*

3. Ports are not physical but logical constructions used in the way they transmit data over the network. They make it possible for a machine to connect to a port on another machine and enable the sharing of information.

A port can be assigned a value between 1 and 65535.

The program DC ++ is designed such that it as a standard will communicate with others in the network via port 1412. By opening this door, others in the network can download and share material made available on the machine where DC ++ is

<sup>1</sup> Note: 'port' is the Danish 'gate'.

installed, thereby providing access to a folder the user wants to share with others on the local machine.

*4) If Poul Erik Gravgaard Larsen's computer has been abused by a "hacker" what would in that case be his IP address and/or how would his alias appear to the DC Agent?*

4. If the defendant's machine had been hacked, it would still provide the correct IP address to others in the network. The defendant's alias could be changed but not his IP address, which is firmly assigned by the internet provider.

*5) Does it make any difference if there is a landline or a wireless connection, if a "hacker" uses a virus or the "port" in question 2?*

5. When using a fixed IP address, this is a fixed value that is visible to others on the internet. It is necessary so that you can communicate with others in a network or the internet. It is not the witness' opinion that a fixed IP address in this case represents a greater or lesser risk of becoming infected with the virus. Nor is the witness's assessment that a machine after being infected with a virus will influence whether there is a static or dynamic IP address. This applies to both wired and wireless connections.

*6) Can the presence of a wireless network card in the computer make the computer more vulnerable to abuse, even if the user does not use it?*

6. Technically speaking, a network can be mis-configured and connected to a second "wireless device" through which data can be collected by a third party. However, it is unlikely that it may have been so influenced in this case. The IP address in this context will be changed to the wireless device, which the network card is connected to. And partly the wireless device should be available over a long period and still be within reach, as the machine and network card can see and connect to the device. It is not the witness' opinion that a network device has a meaning in this context.

*7) Can the witness provide examples of the most common objective when hacking into someone's*

*computer?*

7. The most common purpose for hacking into other people's computers, is for data theft and misuse of the machine's internet connection. In relation to data theft, it is often passwords, images, documents, e-mails, etc., that are of particular interest, while abuse of the internet connection may be related to, for example, sending spam, attacks against others or making data available to others through the connection.

*8) Does the witness know of examples where people have used the DC system, or other file sharing systems through hacking?*

8. As mentioned in answer 1, the file sharing network is not controlled by a central authority that can validate whether the content that is shared among users is ok. In many cases, file sharing networks have been abused to spread viruses and other malicious code such as Trojan horses. Users of file-sharing networks can easily be lured into believing that they can obtain a piece of software which pretends to be one thing, but in reality is something else entirely. File sharing networks have no security as such, other than the trust that users of the network have in respect of each other, and it should be on a very small place.

In this specific case, I still have to point out that the documents supplied, which have been thoroughly reviewed and assessed, give no signs of anything but music and media files that have been obtained from the defendant's machine, but that does not mean that the defendant could not have downloaded malicious software through DC ++ such a virus or Trojan horse, which could also be offered through e-mail or just by surfing the web.

*9) What does the witness say about the risk that persons using hacking to gain access to other people's computers to perform illegal file sharing after the witness' score is very high, high, low or very low?*

9. A virus or other malicious code (worms, or Trojan horse) is able to write data into the folder that is shared with others through file sharing networks and offered through the DC ++ program. However, it

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is very unlikely that it occurred in this case, since an MD5 correlation between the data and media files had already been created for the defendant's PC with the same type of sound files that can be purchased on-line.

If there was a virus it might:

- be a file made available that would only pretend to be sound files to entice others to download files and expose them to viruses (Trojan horse).
- there would be a fixed and easily recognizable list of files and file names with a low probability that would be able to imitate the Danish and Scandinavian song titles with a matching MD5 sum.
- an ordinary internet connection with a Danish user could hardly be abused without his knowledge as a depository for media and audio files. There simply would be no direct economic gain from this for a computer criminal and therefore the risk for this is low.

*10) Is the upload and download speed of internet connections different, if there are more people using the connection simultaneously?*

10. An internet connection is in principle a bottleneck. There is a logical limit to how much can be shared simultaneously. If many people share the same internet connection, it will give a reduced speed when downloading data from the internet.

In this scenario, file sharing with a client such as DC + + is very likely to create a larger number of links against a file sharers engine and as a direct consequence will affect the performance on the data exchange on the internet, both for the user and those who connect to the machine.”

### Explanations

Poul Erik Gravggaard Larsen further explained amongst other things that he rightfully purchased the computer in 2003, and thus not, as he explained in court and High Court, in 1998. The computer was marketed by Medion. It was this computer that he used on 2 September 2005. He had the computer with a landline connection connected, but there was also a wireless component in the computer. He does not

know whether it was open in September 2005. He may have previously used it, but he is not sure. He had antivirus software installed on his computer but no firewall. Antivirus was installed when he bought the computer in 2003. He had not, in the period after 2003, purchased updates for the antivirus program. There may be updates available via the web automatically, but he is not sure.

Through Google, he entered a place on the net, where he found the file sharing program DC Direct. The aim was that he would find a recording of a specific track, which he had in a poor quality on an LP. He no longer remembers specifically which song he was talking about. He thought it was hard to navigate the file sharing program. He followed the program manual, but was not knowledgeable about the details of the program. He was born in 1953 and has no special insight into computer programs. He used file sharing program two to three times, but no further, because he did not find what he sought. The file sharing program was not opened on later occasions, as the program was only used two to three times. It could well be that his PC was on when he went to work, because his PC also acts as a hard disc recorder, allowing him to record programs from television. Sometimes he recorded programs while he was at work. As far as he knows, there were not 13,000 songs on his PC and he cannot recognize many of the tracks allegedly found on his PC.

He has previously installed applications on his computer, but he is not generally aware of the various requirements for installing programs. He has composed music, which he has posted on his computer. This was done through a complex program that someone helped him to install. He used a keyboard to record the numbers. He named the tracks that he recorded. He chose the same names as the originals also had. He remembers that among others, he recorded some Norwegian songs, but he cannot immediately remember the titles of the tracks.

In 2005, he primarily used its internet connection to search information. He does not play on the computer. He saw that the computer sometimes was slow, and sometimes it went completely dead. In these situations, he had to restart the computer.

He uses the alias PEGL wherever he needs to register

himself by name. He does not remember specifically whether he used this registration name for the file sharing program, but he probably did.

He is not sure whether he accurately knows the difference between a router and a modem, but his modem runs through the wire from a box.

He lives in a village, and the distance between his house and the nearest house is 50 meters. There are further 5-6 houses within 200 meters.

The Supreme Court's reasoning and result

The right holders, through the program DCAgent, contacted the IP address 80.161.102.49 on 2 September 2005 in the afternoon from 14:02:38 p.m. (Annex 1). The right holders have indicated that they in this context downloaded a list including titles of musical works on this IP address (Annex 2). According to the ISP's information, the IP address on the 2 September 2005 at 14.10 p.m. was registered with Poul Erik Gravgaard Larsen as a user.

The right holders have not applied the rules of the Danish Code of Procedure chapter 57 a on evidence of infringement of intellectual property rights etc. They also did not explain any guidelines for conducting control work, including the preparation of the annexes. There has not, during the proceedings, been further proof of how the control work in this case was completed, including the certainty that the music files listed in annex 2 existed on Poul Erik Gravgaard Larsen's computer. According to information received, the right holders have only performed control of the content behind the music titles as regards two of the approximately 13,000 titles listed.

Poul Erik Gravgaard Larsen explained that he is in possession of approximately 500 LPs, some of which are hosted on his hard drive, which further contains other downloaded musical works. He further explained that he has used the program Direct Connect to download music from the internet to his computer two to three times.

Upon assessment, the Supreme Court finds that the right holders have not substantiated that the music titles contained in Annex 2 and 15, covers the musical works of Poul Erik Gravgaard Larsen's computer. The

Supreme Court, though, considers it as substantiated that he associated with the use of the program Direct Connect and made music works on his computer available to other users by using this program.

The Supreme Court finds that Poul Erik Gravgaard Larsen has made musical works available on his computer which is a violation of the Copyright Act § 2.

Poul Erik Gravgaard Larsen has explained that he used the program Direct Connect without familiarizing himself with what this entailed. The Supreme Court therefore finds that he has been acting negligently.

The terms of the Copyright Act § 83 relating to remuneration and compensation are fulfilled.

The right holders have not provided more detailed information that can form the basis for determining appropriate compensation for Poul Erik Gravgaard Larsen's use of the musical works. The extent of the infringements is not documented, and the assessment must therefore be based on Poul Erik Gravgaard Larsen's explanation.

Neither have the right holders further substantiated their claim for damages, including those regarding market disruption, loss of sales and expenses for completion of control.

Under these circumstances, the remuneration and compensation is determined on the basis of an estimate that is subject to considerable uncertainty. The Supreme Court then sets out the remuneration and compensation, and Poul Erik Gravgaard Larsen must pay to the right holders a total of DKK 10,000.

The Supreme Court notes in this connection that in cases of making musical works and the like illegally available to the public through the internet, there is no basis of calculating the claim of damage to the right holders for an amount which is calculated by reference to the size of the compensation, for instance by applying the "double up" principle.

On the basis of the remuneration and the amount of the compensation, the Supreme Court finds no basis to reduce the amount that Poul Erik Gravgaard Larsen shall pay to the right holders pursuant to the Damages Act § 24.

## CASE TRANSLATION: DENMARK

Because annex 2 and 15 do not constitute proof of the music works that were on the defendant's computer, these lists do not form the basis for a claim for deletion. As the right holders claim for deletion is formulated it must be rejected.

The Supreme Court subsequently amends the order of the High Court so that Poul Erik Gravgaard Larsen is ordered to pay remuneration and compensation to right holders with a total of DKK 10,000 and dismissed the claim for erasure.

Following the outcome of the case in conjunction with the claims submitted, no party is to pay costs for the district court, High Court and Supreme Court to any other party or to the Treasury.

On those grounds the court states that:

Poul Erik Gravgaard Larsen must within 14 days from this Supreme Court appeal was delivered to the Aller International A/S, Art Management ApS, ArtPeople A/S, Bellevue Entertainment A/S, Bonnier Music Denmark A/S, Circle Records A/S, COPE Records ApS, Crunchy Frog ApS, Da Capo Records, Egmont Litas A/S, EMI music Denmark A/S, Exlibris Music

Gyldendal A/S, Flex Records ApS, Folkeskolens Musiklærerforenings Forlag, Forlaget GUF v/Jan Østergaard Nielsen, Hammock Music Group ApS, Intermusic v/Hans Jørgen Henriksen, Kick Music A/S, MBO Group A/S, Music for Dreams v/Kenneth Bager, Now Music I/S, OH Musik ApS, Olga Musik ApS, Peter Olufsen, Playground Music Denmark A/S, RecArt Music ApS, Sand ApS, SonyBMG A/S, Spin.dk ApS, SteepleChase Productions ApS, Sundance ApS, TUBA Entertainment v/Jerry Ritz Blom, Tutl, Universal Music Group A/S, Voices Music & Entertainment Denmark ApS, Warner Music Denmark A/S, Nordisk Copyright Bureau, Dansk Musik Forbund and Dansk Artist Forbund pay a total of DKK 10,000 plus process rate from 8 August 2005.

Poul Erik Gravgaard Larsen is dismissed from the claim for the deletion of the music recordings.

Neither party is to pay costs for the district court, High Court and Supreme Court to any other party or to the Treasury.

Per Overbeck is thanked for his help with this translation.