DISNEY ENTERPRISES, INC.,

# UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF FLORIDA

CASE NO. 11-20427-WILLIAMS/TURNOFF

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TWENTIETH CENTURY FOX FILM CORPORATION,

# REPLY DECLARATION OF DR. IAN FOSTER IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT

PUBLIC REDACTED VERSION

I, Ian Foster, hereby declare as follows:

- 1. My name is Ian Foster and I currently hold the position of Director of the Computation Institute at Argonne National Laboratory and the University of Chicago. My expert qualifications and background, as well as the materials I have reviewed in performing my analysis in this case, have previously been summarized in the declaration I submitted in support of plaintiffs' Motion for Summary Judgment. In the interests of avoiding repetition, I refer the Court to my February 17, 2011 declaration for a discussion of my qualifications and a description of the Hotfile data sets I consulted for purposes of my analysis in this matter.
- 2. I have been asked by Plaintiffs to explain what Hotfile's produced data shows regarding certain specific claims made by Hotfile, Anton Titov, and Hotfile's expert James Boyle in connection with Hotfile's opposition to Plaintiffs' motion for summary judgment. My analysis and conclusions are explained below.

## **Hotfile's Pre-Lawsuit Suspension and Deletions of Users**

- 3. My February 17, 2011 declaration in this case identified the 43 users whom Hotfile's records indicate Hotfile suspended for copyright-related reasons prior to the filing of this lawsuit in February 2011. I understand that Hotfile has now claimed that there may have been additional users whom it suspended or terminated for copyright-related reasons before this action. In particular, I understand that Anton Titov has claimed that there may have been some users that Hotfile suspended without recording a reason for the suspension, and that there were also some users that Hotfile "deleted" instead of "suspending" them, thereby removing them from Hotfile's user records (its "userdat.csv" data set, which I have described in my previous declaration). Hotfile's produced data sets provide pertinent information related to both of Mr. Titov's claims.
- 4. With respect to Titov's claim that some Hotfile users were "deleted" rather than suspended, and that those users are therefore not reflected in Hotfile's user records, I note that although Hotfile may no longer have user records for those users, Hotfile *does* retain records of the deletion events themselves. Hotfile's "actiondat" data set which is separate from its "userdat" data set from which the users were deleted still contains such records. It also shows the *reason* each user was deleted (the "params" field).
  - 5. Hotfile's records show a total of "deletions of users." Hotfile's data show a

No other deletions are recorded by Hotfile as having been related to copyright.

- 6. With respect to users who were suspended without Hotfile's recording a reason or a date, there are such users recorded as "suspended" in Hotfile's "userdat" table for which Nothing in Hotfile's data suggests that any of these users were terminated for reasons related to copyright infringement.
- 7. However, there is other Hotfile data that shows that most of these users were not suspended until *after* this lawsuit was filed. of those users had uploaded at least one file after February 8, 2011 (according to Hotfile's "uploads" data set). Of those users that are not recorded as having uploaded a file after February 8, 2011 additional users were registered "affiliates" who were still receiving payments from Hotfile after February 8, 2011. This data indicates that of the users for whom Hotfile lacks suspension records remained active users when this lawsuit was filed, and were not suspended until later.
- 8. Hotfile's data thus show suspended users for whom Hotfile lacks suspension records and who neither uploaded a file, nor have been paid as an affiliate, after this lawsuit began. However, nothing in Hotfile's data indicates that any of these users were suspended for copyright reasons, as opposed to other reasons (such as for cheating or for fraud). Before this complaint was filed, Hotfile's data indicates that approximately its user suspensions were for reasons other than copyright (only out of suspensions were copyright-related). In addition, only of those suspended users had received even a single takedown notice on any files they uploaded.

### Use of Hotfile to Upload

9. I understand that it may be of interest in this case how many Hotfile users have used the service to upload files, as opposed to using it for downloading purposes only. In particular, I understand that James Boyle has opined that Hotfile can be used for "storage" purposes. Because Hotfile records for each file the registered user (if any) who uploaded it, it is a relatively simple task to calculate the percentage of Hotfile users with accounts who have ever used the service to upload. A comparison between the number of unique userids associated with

uploaded files in Hotfile's uploads data set and the total number of registered users reflected in Hotfile's userdat data set shows that of all registered Hotfile users have ever uploaded a file, and that of Hotfile users who have ever been "premium" users have ever uploaded a file. Note that the latter figure is for users who have ever been premium, at any time – which may in some cases include times before the user became premium or after they ceased being premium. Therefore, the actual number of users who were premium users at the time they uploaded files to Hotfile is likely even lower than

### "Zero Download" Files

- 10. I understand that Hotfile has contended that the existence of so-called "Zero Download" files in its records (i.e., files that were uploaded to Hotfile but have never been downloaded) constitute evidence that Hotfile was predominantly used by its users to store their files, rather than to make them available for others to copy. Hotfile's data show that there have been 62,812,876 files uploaded to Hotfile, over the course of its existence, that have not been downloaded. I have been asked by Plaintiffs' counsel to extract additional information from Hotfile's data sets regarding these Zero Download files.
- of the 62,812,876 Zero Download files are active the rest have all been removed for various reasons. The latter files have been deleted for a variety of reasons: some Hotfile deleted for inactivity, some were deleted because the uploading user was suspended as a repeat infringer, and some were the subject of a takedown notice or otherwise removed as infringing (as well as the related category of files removed because they were part of a folder that was the subject of a takedown notice). A much smaller number were removed because the uploading user was suspended for some other reason (or a reason not reflected in Hotfile's records), or deleted by the user him- or herself<sup>1</sup>:

	Zero Download Files (All)	
Category	Count	Percentage of Total
Active		
Deleted for Inactivity		

<sup>&</sup>lt;sup>1</sup> My previous February 17, 2012 declaration explained how each of these file statuses can be extracted from Hotfile's data sets. *See* Foster Decl. Part VIII.B & Part XI. While my previous declaration did not count files removed by the user, those are similarly indicated with a dedicated status code in Hotfile's data.

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User Suspended as Repeat	
Infringer	
URL-specific Takedown	
notice / Removed as	
Infringing	
Folder takedown notice	
User Suspended for Unknown or non-copyright reason	
Deleted by User	

12. Among the active Zero Download files, I have been asked by Plaintiffs' counsel to extract data showing how many of those files were uploaded by premium as opposed to nonpremium users. In addition, among the subset of active, Zero Download files uploaded by premium users, I was asked to extract data showing how many of those files were uploaded by premium users who have received takedown notices on their files in general. The data is as follows:

	Zero Download Files (Active)	)
Category	Count	Percentage of Active Files
Nonpremium Uploader		
Premium Uploader with		
Strikes and/or Notices		
Premium Uploader; No		
Strikes or Notices		

### **Downloads of Files In Suit**

13. Hotfile's expert, James Boyle, has recited figures regarding the total downloads of selected files that he has identified as noninfringing. I note that Plaintiffs have identified many files that they claim infringe their copyrights in this action (the "Files in Suit"), and that many of the Files in Suit have been identified by the Plaintiffs as representing the same motion pictures or television programs as other Files in Suit. In order to determine the cumulative figures for eight selected titles identified by the Plaintiffs, I have summed up the total downloads (from Hotfile's

<sup>&</sup>lt;sup>2</sup> There were also a comparatively minimal number of files uploaded by unregistered users (anonymous uploads) – approximately — which I counted as nonpremium for purposes of this calculation.

"uploadsdownloads" data set) for all files identified by Plaintiffs with the same title. I also indicate the number of copies of each title that I found in the Files in Suit ("Files").

Title	Files Downloa		oads	
Inception				
Life As We Know It				
Hangover				
Harry Potter and the Deathly Hallows Part I				
127 HOURS				
BLACK SWAN				<b>-</b>
Due Date				
Get Him to the Greek				

14. Relatedly, I understand that Hotfile has identified what it claims are the 100 "most downloaded" files on Hotfile based on their download count in the uploadsdownloads data set. When the download counts for the files that Plaintiffs claim as infringing are summed by title (instead of on a file-by-file basis), the number of downloads of those files exceeds in many cases the download counts identified by Hotfile in its "Top 100" list. I have summed up the download counts for the Files in Suit identified by Plaintiffs on a title basis. In addition, in order to similarly count cumulative downloads for the files in Hotfile's "Top 100" list, I have (1) identified all files on the Hotfile system that represent the same file (by identical "hash" value) as the files in Hotfile's Top 100, and summed up the cumulative download counts for all copies of those files, and (2) to be conservative, have further summed together the download counts for files on Hotfile's list that have the same filename, even where the "hash" is different. Then, I compared the total download counts of the titles on Plaintiffs' Files in Suit list to those of all files on Hotfile's list inclusive of hash- or title-identical files. The list of the 100 with the highest download counts resulting from that comparison is attached as Exhibit A. For the sake of clarity, I have shaded rows representing Plaintiffs' Files in Suit. This combined list shows that many of Plaintiffs' files in suit, when organized by title, are as frequently downloaded (or more frequently downloaded) than many of the files identified by Hotfile as being the "most downloaded" files on the system, even when accounting for multiple instances of those files on Hotfile.

### Files Downloaded By Hotfile Employees

15. I understand that Plaintiffs' original motion for summary judgment, using data produced by Hotfile showing downloads by its employees/contractors, identified files that

	At Plaintiffs' counsel's request,
	I have attached the list as
Exhibit B.	
Planetsuzy.or	g
16.	My previous February 17, 2012 declaration (at Paragraph 56) stated that Hotfile's
affiliate data c	how that the website was naid by Hotfile through the most recent

# affiliate data show that the website was paid by Hotfile through the most recent date in Hotfile's produced data. I understand that Anton Titov has claimed that was not a Hotfile affiliate at the time of an email exchange related to the website in early 2010. While I do not know what Mr. Titov means or intends by his claim, Hotfile's affiliate payment data show that Hotfile continuously paid the user who registered the website, user number every week without interruption. Hotfile's data show payments totaling rom Hotfile to the user. Download Counts of Statistics Study Files

17. At Plaintiff's counsel's request, I have reviewed, from Hotfile's uploadsdownloads data set, the total download counts for the files in Dr. Waterman's statistical sample of files downloaded from Hotfile. Out of the sample of 1,750 files, there are 6 files with a download count of 1 and that were classified as "highly likely infringing" by Mr. Zebrak.

I declare under penalty of perjury that the foregoing is true and correct.

Executed in the State of California this 19th day of March, 2012.

Ian Foster, PhD