

## **(1) User Education**

- **Copyright Tips In Plain English**
  - YouTube instructs users in a “Copyright Tips” section of the YouTube website how to understand copyright infringement and strongly discourages infringement.
  - In plain language it explains what users may and may not do.
  - **[http://www.youtube.com/t/howto\\_copyright](http://www.youtube.com/t/howto_copyright)**



## (1) User Education

- **Three Clear, Bold and Prominent Messages at Time of User Upload:**
  - “Do not upload copyrighted, obscene, or any other material which violates YouTube’s Terms of Use.”
  - “When clicking ‘upload Video’ you are representing that this video does not violate YouTube’s Terms of Use and that you own all copyrights in this video or have express permission from the copyright owner(s) to upload it.”
  - “Do not upload any TV shows, music videos, music concerts or commercials without permission unless they consist entirely of content you created yourself.”



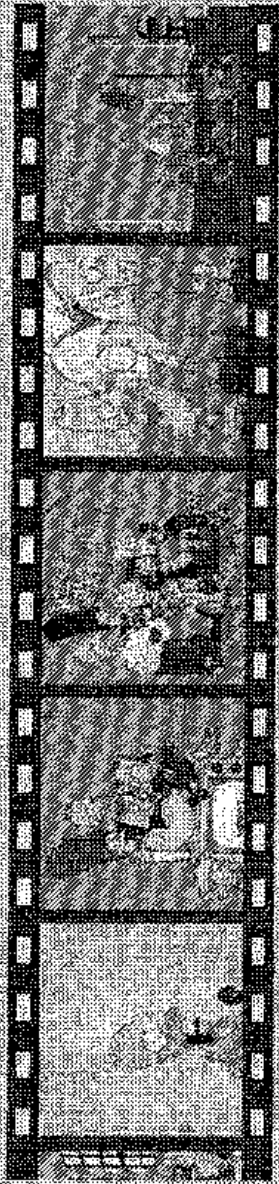
## (2) Technology

- **Digital Hashing: MD5**

- YouTube has implemented technology to prevent videos removed for copyright reasons from being uploaded again.
- The technology creates a unique identifier of each unauthorized video when it is removed.
- If a user thereafter tries to upload the identical video that matches that unique identifier, the video is automatically rejected regardless of whether the users is using a different username or file name.



## MD5-Hashing Explained



...01110010101011000011111100111000011110010101...

Calculation of a unique 32-bit hexadecimal value using all bits in file, e.g. "0xFFFFFFFF"

- ✓ MD5 hashes are efficient and accurate
- ✓ The hash-value covers both audio and video, and are filename independent
- ✓ MD5 hash technology prevents the upload (or repeat upload) of the *identical* video file



## **(2) Technology**

- **Content Verification Take-Down Tool:**
  - Automated DMCA notification and takedown tool for content companies
  - Electronic tool that enables content companies to easily search for and identify videos on the site that contain their content and have them promptly removed with the click of a mouse.



Search results for "puppy"

Results 1-25 of about 27,470 (0.74s)

Search in Videos

Advanced Search

Sort By: Relevance

Refine by Category: All

Actions & Controls: Copy, Share, Embed, Print, Download

Content Verification Tool

This page lists all of the videos you have selected. To flag the videos from this list, check the box to the left of the video. Once you have checked all of the videos you'd like to flag, click the "Flag Videos" button at the bottom of the list to send an email with your list to our internal copyright team for review.

Per your agreement with YouTube, please remember that by flagging these videos, you are stating UNDER PENALTY OF PERJURY that:

- you are the owner, or an agent authorized to act on behalf of the owner of an exclusive right that is allegedly infringed;
- you have a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law; and
- the notification is accurate.

Check All Uncheck All

Video ID	Video Title
KES0cUCz9IQ	sunny puppy
o6LXGZ5W4nc	Puppy's Dig It
3M0W4JePC0Q	Puppy robot

Remove from List Flag Video

- Contact YouTube for password protected access to the console (limited # of seats)



### **(3) Policies**

- **Clear and Publicly Posted YouTube Procedures**
  - **Terms of Use clearly prohibit copyright infringement**
  - **Numerous links on every page of the YouTube website:**
    - **Explains simple email DMCA notice-and-takedown process**
    - **Copyright tips and policies**
- **YouTube is generally recognized by content owners as having an industry-leading response time to takedown requests.**



### **(3) Policies**

- **Repeat Infringer Policy**

- YouTube has a strict policy of terminating accounts of users who are repeat infringers.
- Three "strikes" and you're out
- This policy is automated.



### (3) Policies

- 10-Minute Limit On Video Uploads
  - Videos uploaded to the site by general users cannot exceed ten minutes in length
  - Prevents users from uploading entire episodes of infringing commercial programs or movies.
  - The system automatically rejects videos over ten minutes



## **(4) Business Partnerships**

- YouTube works closely with content companies to enable them to:
  - Harness the powerful promotional potential of YouTube's growing audience
  - Monetize content and share in the revenue
  - Connect with fans in new ways
  - Create a win-win for all parties



## (4) Business Partnerships

- Deals generally include two types of monetization:
  - Partner content delivered directly from content partner
  - “Claimed Content”
    - YouTube and content company work together to identify partner content on YouTube (“Claim Your Content”)
    - Once content identified and “claimed,” YouTube sells ads and shares revenue with partner
    - YouTube does not sell ads around user uploaded content that has not been “claimed” by a content partner



## **(4) Business Partnerships**

- Claim Your Content: Two Ways for Partner to Locate Content on YouTube
  - Identification With Audio Fingerprinting
  - Identification With "Claim Your Content" Metadata Search Tool



## (4) Business Partnerships

- Audio Fingerprinting
  - Our audio fingerprinting system is in testing now and rolling out soon for more content partners
  - With cooperation from the content partner, this system will assist in identifying the partners content by its audio elements—not video (e.g., a soundtrack to a film)
  - YouTube currently licenses Audible Magic's technology, and is always evaluating other options
- While not yet commercially viable, YouTube is actively evaluating and intends to implement video fingerprinting solutions.
- The more content we identify, the more we can license and monetize—our interests are aligned



## **(4) Business Partnerships**

### **Identification With "Claim Your Content" Metadata Search Tool**

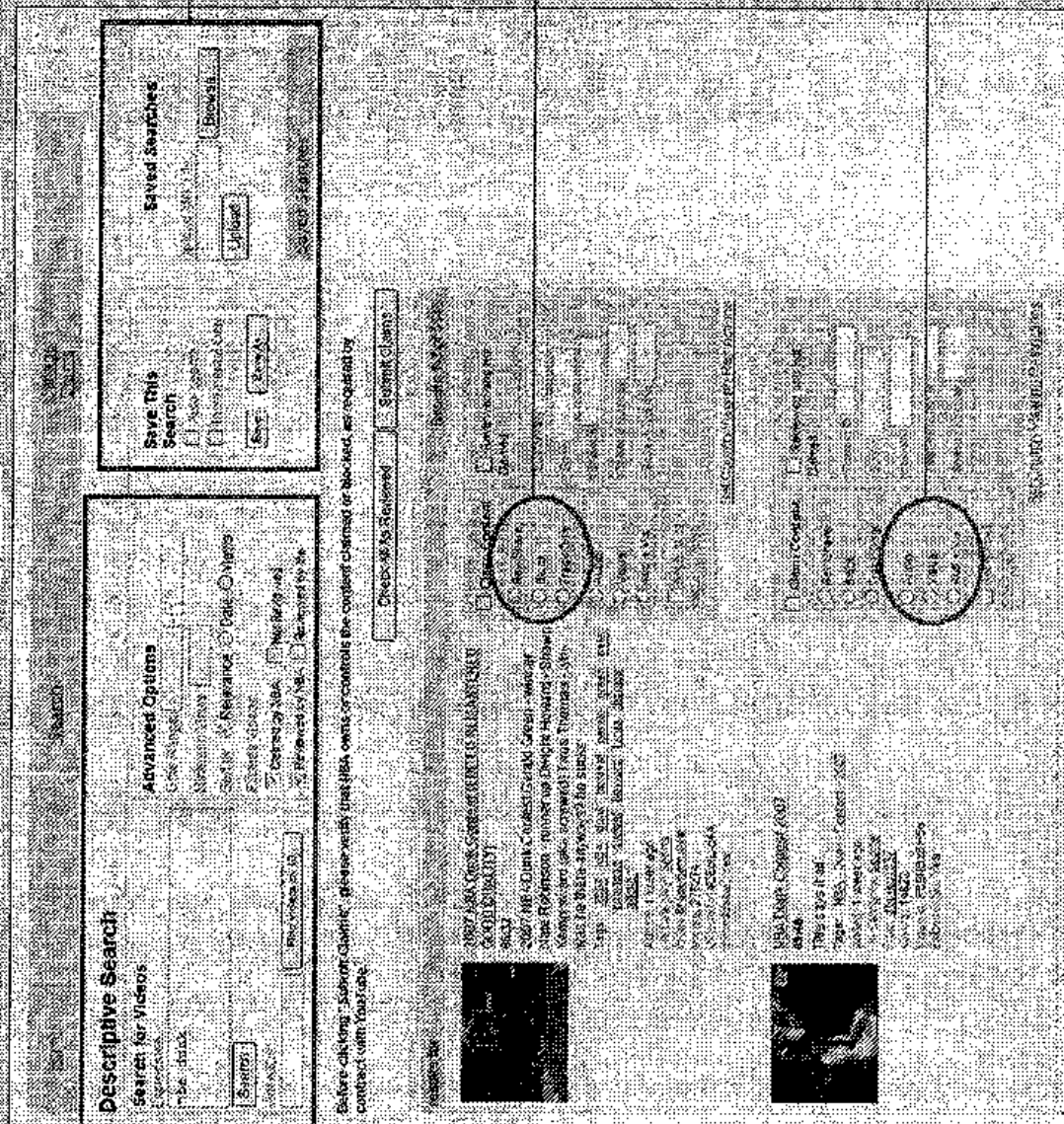
- For cases in which audio fingerprinting is not an ideal solution, YouTube also offers content holders metadata search tools that notify content holders when videos whose metadata includes certain keywords are uploaded to the site.
- Once notified, content partners choose whether to license and monetize such content or take such content down.



- Search interface
- Manage searches

**Action setting:**  
block, track, or  
monetize

Copyright claimed:  
audio, video, or  
audio+video



Screen shot of CYC search console



# CYC management console

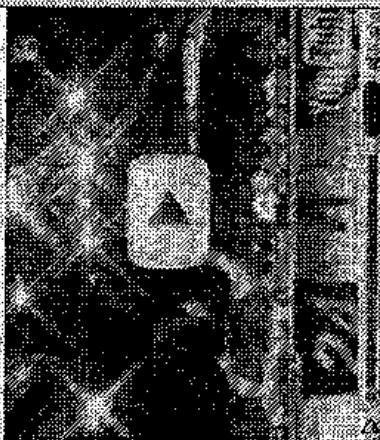
Claim ID: 32KThaoQByo - Video ID: 5BKm3pUctk8

Claim Status	Active	Close Claim
Custom ID	14224618.070217	
Claim type	Audio/Visual	
Policy	Pre Share	
Match Policy	Pre Share	
Ref ID Match	21	
Licensed	Yes	
Show Title		
Episode Title		
Episode Number		
Season Number		
Rating	TV-14	
Notes		

See Country Metadata  
RESTORE

Submit Changes Cancel

- ❖ Ability to assign a custom ID for internal tracking purposes
- ❖ The action setting for a claimed video can always be changed (e.g., from track to monetize)





# Removal of Inappropriate Content

*YouTube is committed to providing a safe and positive environment for its users*

- YouTube therefore prohibits the following types of content from appearing on the site.
  - Obscene
  - Threatening
  - Pornographic
  - Harassing
  - Hateful
  - Racially or ethnically offensive
  - Encourages or depicts illegal behavior
  - Otherwise inappropriate
- YouTube provides community flagging tools to enable any user to easily report inappropriate content. Reports are viewed by YouTube's "Content Squad" very quickly, and inappropriate material is removed from the site.



## Summary

### YouTube Has In Place Robust Copyright Policies

- ✓ Education (Copyright tips, Prominent Messaging)
- ✓ Technology (MD5 hash, Content Verification Tool)
- ✓ Policies (10-Minute Limit, Repeat Infringer Policy)
- ✓ Promote Business Opportunities
  - Claim Your Content
  - Expand Options to Promote & Monetize Beyond Take Downs



Speaker Notes Slide: 1  
Welcome to this overview of Google.



To: "David Eun" <deun@google.com>  
 From: "David Eun" <deun@google.com>  
 Cc:  
 Bcc:  
 Received Date: 2007-02-15 15:49:37 CST  
 Subject: lger

Every potential partner (with or without a YT deal) has access to the automated takedown tool. This comprises of (i) an online console to file DMCA complaints and request take-downs and (ii) an MD5 hash to pro-actively take down a new upload of a previously taken-down video file (i.e. assuming it is bit-for-bit identical).

>> Our CYC tools are now live as well and are only offered to partners who enter into a revenue deal with us. In particular, I believe that WMG and UMG are live. In order to identify possible infringements, they can either upload their videos into a reference database (beforehand) for matching through fingerprint (FP) technology or perform keyword searches across the YT index. Once a video is identified, the partner can either request (i) = take-down, (ii) embrace with revenue share, or (iii) embrace without revenue share but tracking. We calculate both a hash and derive a FP of every video assigned in either of these three buckets, and future uploads of the same video (through either exact (=hash) or approximate (=FP) matching) is treated in the same way (takedown, embrace, track) as the originally designated one.

Today we have:

- 1) digital hashing on all files
- 2) Content Verification program offered on a select basis to partners (or companies that have contacted us with DMCA concerns). This is basically a way to easily notify YouTube of infringing content. In practice the "user" sees a little check box next to video search results. If they check the box we are notified of a takedown request. We offer this on a select basis because of the potential for abuse/misuse by content companies. All searches have to be entered manually – same behavior you have as a general YouTube user

The new CYC system has

- 1) digital hashing on all files
- 2) Audio fingerprinting system whereby the content partner can send "reference fingerprints" to Audible Magic's database along with a policy decision to license or block each piece of content. Each time a piece of content is uploaded to YouTube we will check Audible's database and look for a match. If there is a match the partner's policy kicks in (e.g. license or block).
- 3) Advanced text search tool. Enables partners to enter in any number of search terms or strings. Partners can send these terms to YouTube in an

Highly Confidential

DATE: 4-22-09 EXHIBIT# 27  
 DEPONENT: HURLEY, C.

CASE: Viacom, et al., v. YouTube, et al., The Football Association Premier League, et al., v. YouTube, et al.,  
 Case Nos. 07-CV-2203 and 07-CV-3582  
 A. Ignacio Howard, CLR, RPR, CSR No. 9830

000001-01511226



XML feed or enter them manually. Searches can be narrowed or broadened and all searches can be saved. YouTube will "push" search results to the partner in the form of a daily email showing and matches. Partner gets a nice admin interface showing all the matches. Partner is responsible for reviewing the matches and per the DMCA identifying their content. If the partner identifies content they are given the choice to either license or block the content. Any content the partner identifies is automatically audio fingerprinted and placed in the Audible Magic database so the entire process gets smarter over time.

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David Eun  
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Last Modified: January 9, 2007

## YOUTUBE/GOOGLE CONTENT IDENTIFICATION AND CLAIMING SYSTEM

### "CLAIM YOUR CONTENT"

#### WHITE PAPER

#### I. Introduction

##### 1. Overview

At all times during the Term, YouTube/Google shall facilitate and maintain content identification services in accordance with this Exhibit [ ]. It is the intent of the parties that these content identification services will enable PARTNER to easily identify audio and audiovisual materials on the Video Service that are owned or controlled by PARTNER, and enable PARTNER to elect in each case to either (A) license the content to YouTube/Google in connection with the Video Service on the terms and conditions prescribed in the Agreement or (B) remove it from the Video Service (the "Election"). The content identification services shall consist of a three step process outlined in summary form immediately below and described in further detail in this exhibit:

- a. Video Hashing. YouTube/Google will create and retain a unique MD5 hash of each file that is identified during the Term as Blocked Content (as defined below) or that is removed from the Video Service due to an allegation of copyright infringement. YouTube/Google will block any files uploaded during the Term that match any of the MD5 hash(s) of any previously removed file.
- b. Audio Fingerprinting. For PARTNER content that is not identified by Video Hashing, YouTube/Google will employ audio fingerprinting technology to identify PARTNER content uploaded to the Video Service during the Term. In the event that a file is identified as containing audio content owned or controlled by PARTNER, PARTNER shall have the option to make the Election.
- c. Text & Tag Searching. For PARTNER content that is not identified by Video Hashing or Audio Fingerprinting, YouTube/Google will supply PARTNER with access to the Search & Claim Tool (as defined below) and shall run PARTNER Searches (as defined below) on behalf of PARTNER.

Deleted: Content Identification Claiming  
Filtering and Blocking (CLEAN  
11.18.06)

2

AUTOCASE

DATE: 12/10/08

DEPONENT: Chastagno

EXHIBIT# 2

CASE: Viacom, et al., v. YouTube, et al., The Football  
Association Premier League, et al., v. YouTube, et al.,  
Case Nos. 07-CV-2203 and 07-CV-3582  
A. Ignacio Howard, CLR, RPR, CSR No. 9830