Codec decision
A look at IPR

updated to take into account last week's Cisco announcement

First, a look at H.264. What is it?

- 29 different parts of a standard

- Several profiles and parameters

- Interoperability requires *agreement*

- ~~This group has not agreed on what part of H. 264 we are talking about~~

- What the IPR issues are depends on the profile selected
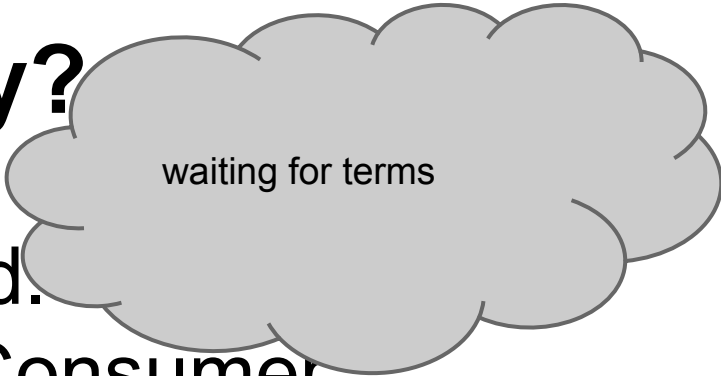
H.264 Requirements

- An implementation you can use
  - Software
  - Tuned for real time
- Patent Licenses
  - MPEG-LA H.264 patent pool license
  - Other possible licenses
- An acceptable field of use
- ~~A company to take out the licenses~~
- ~~An accounting to figure out what you~~
  - ~~What are you counting?~~
  - ~~When do you count it?~~
- ~~Money to pay the license fees and royalties~~

if you can use Cisco's offer

When do we have to pay?

waiting for terms

- Terms not publicly published.
- ~~Schedule A: Personal and Consumer~~
    - ~~Per unit cost~~
    - ~~Non commercial and *internal* business free~~
- Schedule B: Pay per view
    - Per transmission
    - Per broadcaster
- Schedule C: What does not fit into the above
    - Oops - there is no schedule C.
- All cases impose business model limitations.
- Imposes a barrier for entering the browser market.

H.264 Sw/Hw Implementations

- ~~Separately-licensed implementation required~~
- ~~Open source: x264~~
    - ~~Available under GPL license~~
    - ~~Code not well-tuned for real-time~~
- Bundled OS H.264
    - Not well tuned for real-time.
- Hardware implementations
    - Often not well tuned for real time
    - Often hidden behind private APIs
- Commercial implementations -- require licenses, license/support fees, and royalties
- Evaluations require licenses/NDAs

Using Platform H.264 support

- Remember the variability?
  - Some platforms have good support, but don't make it available.
  - Some platforms have terrible support.
  - Some platforms have NO support.
- Sensible products want to make sure it has *something* available - this is the MTI!
- There's no rebate for "I shipped this, but I don't think it's used much".
- Still doesn't cover you for Schedule B (pay per view)

Now, a look at VP8 IPR.

- One, PUBLIC, statement to read.
- NO counting required.
- NO paperwork to sign (unless you want to)
- Hardware IPR is available free of charge too.

IPR Licenses for VP8

- Google has core IPR for VP8

- Google has licensed that IPR on a royalty free basis

- MPEG-LA "VP8 Pool" is discontinued

- Google has an MPEG-LA agreement for VP8.

MPEG-LA Agreement

- Allows Royalty Free usage of all relevant patents in VP8

- Google is licensing the IPR under this agreement

- Agreement was made public March 6.

- Sub-License is published at webm-ccl.org.

- Sub-License is in line with the W3C's definition of a Royalty Free License.

Sources

- draft-burman-rtcweb-h264-proposal-00
- draft-dbenham-webrtc-videomti-00
- draft-marjou-rtcweb-video-codec-00
- http://www.mpegla.com/main/programs/avc/Documents/AVC_TermsSummary.pdf
- http://www.iso.org/iso/standards_development/patents
- http://blog.webmproject.org/2013/03/vp8-and-mpeg-la.html
- Cisco's announcement of last week