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?

- 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.iso.org/iso/standards_development/patents
- http://blog.webmproject.org/2013/03/vp8-and-mpeg-la.html
- Cisco’s announcement of last week