Codec decision
A look at IPR

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 made 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 pay
  - What are you counting?
  - When do you count it?
- Money to pay the license fees and royalties

When do we have to pay?

- Terms not publicly published.
- Schedule A: Personal and Consumer
  - Without remunerations
  - Including *internal* business
- 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.
  - Some platforms ARE the product.
- 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)
- Proposed mutual protection agreement (CCL):
  - CCL Members are protected from each others patents (broad license to all members)
  - CCL Members do not have to identify covered patents (clean and simple)
  - CCL Members can terminate their patent license if another member sues them (you can get out).
- 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 will be published in next several weeks.

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

Sources

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