

OPEN MEDIA COMMONS WORKSHOP – A PATENT PERSPECTIVE

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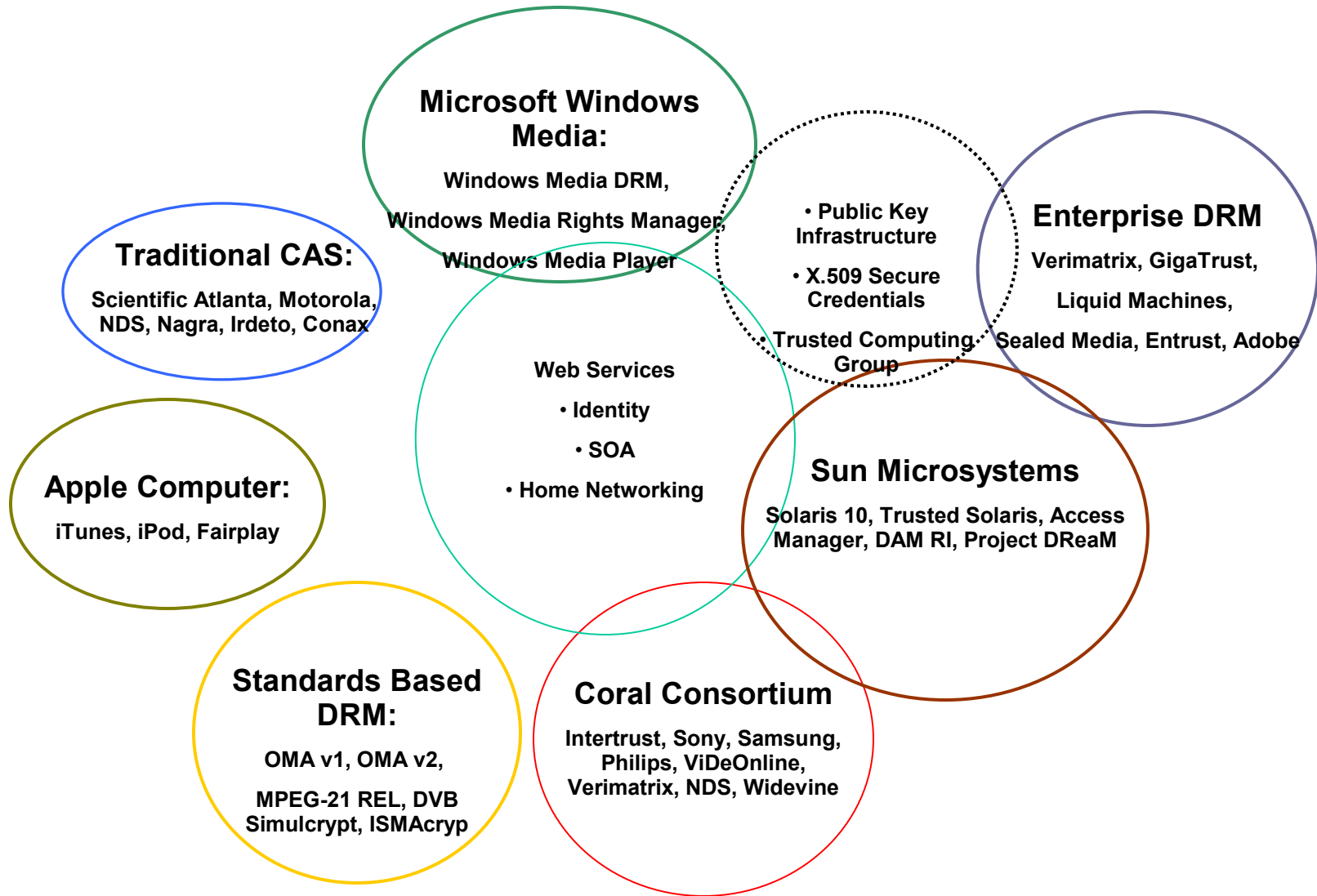
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OMC Legal Framework – Goal is to Facilitate OMC Objectives

- Commitment to Ideal of Open Royalty Free DRM Solution
- Open, Transparent, Community Driven Process
- Streamlined Specification Development
- Parallel Open Source Reference Implementation Development
- Public Forum or “Commons” to address IP

DRM EcoSystems



Patent Review Goal – To Identify and Address Patents Relevant to DReaM Spec Development

- Identify and scope out IP landscape for DReaM-relevant tech specs
- Identify 'patent-clear' paths for various branches of the DReaM-relevant tech specs
- Determine possible IP strategies and technical approaches to bypass 'patent thickets' encountered
- Enlist industry participation to address patent and other IP issues for royalty free DReaM tech specs

Identify DReaM-relevant Patent Landscape

Identify & Study 3rd Party Patent Portfolio

Select key IPC class codes and technical key words

Filter by IPC class code and search by key words on full-text of all active USPTO patents (issued and published)

Analyze search results to understand IP landscape in selected DReaM Tech Specs

Select Key IPC Class Codes and Technical Key Words

- Comprehensive key word taxonomy developed
 - > Based on DReaM tech specs
 - > Current industry initiatives / programs related to DRM, CAS, DVB, etc.
- All major DRM IP holders included in developing IP landscape
- Active, lesser known DRM IP holders also included

Filter and Search USPTO Patent Database

- The taxonomy was continuously revised to focus on areas of strong interest to the DReaM project
- Taxonomy Structure
 - > The taxonomy is a two-tiered structure of major categories and secondary categories
 - > Each patent was mapped to between one and three taxonomy categories.

Major Taxonomy Categories / Subcategories

Major Taxonomy Category	Taxonomy Subcategory
CAS	Addressability
	Entitlement Delivery
	Key Delivery, Key Management
	Enforcement
	On Demand (VOD)
	Pay Per View (PPV, IPPV)
Content Packaging	Meta Data (Includes Identity)
	Encryption
	Integrity Validation
	Watermarking
	File Format
	Streaming Format
	Fingerprinting
Content Selection	Interactive Processes
	Content Consumption
	Content Purchase/Billing
	Content Shopping
	Content Tracking

Major Taxonomy Categories / Subcategories (cont.)

Major Taxonomy Category	Taxonomy Subcategory
Rights Management	License Methodologies (Includes Delivery)
	Rights Data Dictionary
	Rights Expression Language
Robustness	Secure Hardware
	Secure Silicon
	Secure Software
	Tamper Response, responding

Major Taxonomy Categories / Subcategories (cont.)

Major Taxonomy Category	Taxonomy Subcategory
Security	Trust
	Authentication
	Public Key Cryptography
	Policy
	Robustness
Hardware	Media Player
Enforcement	License
	License Handling
Network	License Conductor
	Bundled Delivery
Trust	Authenticate, Authentication
	Identity Services
	Identity, Identification
	Policy
	Public Key Infrastructure
Not DRM Related	Other

USPTO Patent Search – Preliminary Results

- Based on the taxonomy developed and other parameters, over 1,000 patents initially identified and analyzed in the DReaM project search
- About 50% of patents preliminarily identified in the search relate to CAS, Content Packaging, Security, and Rights Management
- Upon closer evaluation, a significant number of patents determined not to be relevant to DReaM project

Patent Analysis

- The patents were analyzed by reviewing the abstract and portions of the patent specification to determine the overall subject of the patent
- Selected claims were analyzed in order to identify the specific taxonomy mappings
- In order to optimize the utility of the analyzed set, certain patents were flagged as being less relevant to the DReaM project.

Patent Analysis – DReaM CAS Preliminary Results

- Each patent preliminarily identified as related to DReaM CAS draft tech spec was mapped against the 2nd Level taxonomy
- For each patent, selected claims were reviewed in detail to determine whether the claim language / limitation would place the claim(s) outside DReaM CAS draft tech spec
- Preliminary patent analysis findings are very encouraging for DReaM CAS tech spec

Patent Analysis – DReaM CAS Preliminary Results (cont.)

- For a very limited number of patents of higher importance to DReaM CAS tech spec
 - > Additional claim analysis work to be performed
 - > Possible technical design arounds may be considered
 - > Patent invalidity studies and other IPR-related initiatives not ruled out

Patent Analysis – DReaM MMI

- Review and analysis of patents relevant to DReaM MMI tech spec currently underway
- Analysis approach similar to DReaM CAS framework
- Patent analysis more meaningful as 'use cases' are being proposed/developed

Patent Analysis Disclaimer

- While we are encouraged by our findings so far, the investigation continues and Sun and OMC cannot make any representations regarding encumbrances or the validity or invalidity of any patent claims or other intellectual property rights claims a third party may assert in connection with any OMC project or work product.
- Sun encourages all interested parties to engage in their own evaluation of the DReaM specifications to build confidence in the ideal of developing an open, royalty free DRM solution, and to the extent you feel comfortable, to share with the community in the OMC forums your own findings, recommendations and other feedback.

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