

# **NIST**

Global Standards Information



## **The U.S. Standards System and Intellectual Property Rights**

**Henry Wixon  
Chief Counsel**

# IPR and US Standards Development

IPR can pose challenges to the development and implementation of voluntary standards

- Standards developers have sought to ensure that a standard would infringe undisclosed patent claims, seeking royalties after a market has been locked in
- Standards developers have been unwilling to license their IPR (particularly patents) to others, impeding adoption of a standard
- Third party (non-member) owners of IPR essential to standard implementation have little or no incentive to license on reasonable terms
- SSO business models are often based in whole or part on the sale of copyrighted standards they develop

## Dell and Rambus Set the Stage for SSO Patent Policies

Dell's 1996 consent decree with the FTC regarding Dell's participation in a standard setting process hosted by the Video Electronics Standards Association (VESA):

- Dell failed to disclose to VESA its patent that it believed would be infringed by any implementation of the standard under consideration
- After adoption of the standard and its initial commercialization, Dell identified its patent and asserted a right to require royalties

FTC concluded that such behavior violated antitrust laws:

- Dell agreed to grant a royalty-free license to any implementer of the standard
- Dell was required to subject itself to oversight in its standards-related activities for a period of ten years

## Dell and Rambus Set the Stage for SSO Patent Policies

The non-manufacturer memory technology company Rambus is still in proceedings over its standards activities relating to SDRAM dating back to the early 1990s:

- FTC ruled in 2006 that Rambus illegally created a monopoly in certain standards-reliant technology by abusing the Joint Electron Device Engineering Council (JEDEC) standard setting process
- FTC required that Rambus license essential patent claims, set limits on the amount of royalties, and barred any royalties after three years
- FTC required Rambus to make complete disclosure of all relevant patents as required by any SSO, have a “Commission-approved compliance officer,” and maintain auditable records of its activities
- Appeals Court reversed the FTC in 2008, finding that it failed to prove monopolistic anti-competitive behavior

## IPR in Standards Setting – The ANSI Patent Policy

“There is no objection in principle to drafting an American National Standard (ANS) in terms that include the use of an essential patent claim (one whose use would be required for compliance with that standard) if it is considered that technical reasons justify this approach.”

## IPR in Standards Setting – The ANSI Patent Policy

“The ASD shall receive from the patent holder or a party authorized to make assurances on its behalf, in written or electronic form, either:

(a) assurance in the form of a general disclaimer to the effect that such party does not hold and does not currently intend holding any essential patent claim(s); or

(b) assurance that a license to such essential patent claim(s) will be made available to applicants desiring to utilize the license for the purpose of implementing the standard either:

(i) under reasonable terms and conditions that are demonstrably free of any unfair discrimination; or

(ii) without compensation and under reasonable terms and conditions that are demonstrably free of any unfair discrimination.”

## IPR in Standards Setting – The ANSI Patent Policy

“Neither the ASD nor ANSI is responsible for identifying patents for which a license may be required by an American National Standard or for conducting inquiries into the legal validity or scope of those patents that are brought to their attention.”

# IPR in Standards Setting – ANSI Guidelines for Implementing Patent Policy

## “Possible Procedures for Implementing the Policy”

- Early Disclosure of Patent Rights
  - Where known (no obligation to search)
  - By any participant (e.g., non-patent holders)
- Early Indication of a Willingness to License
  - Refusal may be ground to favor alternative technology
- Subsequently Discovered Patents
  - Same assurances required; failure to do so results in withdrawal of ANSI approval of standard

# IPR in Standards Setting – Other Forms of IPR

## Copyright – Ownership Typically Retained

- Member-contributed material is
  - irrevocably licensed to the SSO to make the contribution available to other members for purposes of considering its inclusion in a standard
  - licensed to the SSO to distribute the eventual standard with the contribution included, in whole or in part
  - Subject to agreement that the SSO will own the copyright in the final standard into which the contribution is incorporated (the SSO business model)
- The *Veeck* Case – “Does the government's decision to make the copyrighted proposals binding place the copyrighted material in the public domain? The First Circuit said maybe. The Second and Ninth Circuits said no. And nine of fifteen Fifth Circuit judges said yes.”

## IPR in Standards Setting – Other Forms of IPR

### Trademarks – Ownership Uniformly Retained

- IPR policies uniformly provide that members retain ownership of their trademarks, and SSOs retain ownership of theirs
- Trademarks particularly important to SSOs that conduct, or authorize the operation of, certification testing

### Confidentiality – All or Nothing

- IPR policies either define what is entitled to be maintained in confidence, or (more often) provide that nothing will be considered confidential
- Timing of disclosure to non-members is important as early knowledge of evolving standards is of commercial value

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### NIST's Smart Grid Interoperability Standards Project

Under the [Energy Independence and Security Act \(EISA\)](#) of 2007, NIST has *"primary responsibility to coordinate development of a framework that includes protocols and model standards for information management to achieve interoperability of smart grid devices and systems..."*

NIST received \$10M in ARRA money through DOE to fund Smart Grid activities

<http://www.nist.gov/smartgrid/>

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### NIST's Smart Grid Interoperability Standards Project

#### **KEY CONSIDERATIONS**

- Smart Grid is a vital national (global) infrastructure
- Standards must be
  - Open and interoperable
  - Broadly adopted
  - Readily and reasonably available to implement by anyone
  - Implementable at reasonable and affordable cost to ratepayers/ consumers

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### NIST's Smart Grid Interoperability Standards Project

#### **WHAT WE WANT TO AVOID – IPR “SURPRISES”**

- Patent claims that surface after standards have been adopted
  - Especially patent holders that are unwilling to license under RAND conditions
- Discovering, after standards are adopted, that associated royalties impede Smart Grid deployment or make it uneconomical for consumers due to either
  - Excessive royalties for individual patent holders and/or
  - Royalty stacking
- Licensing commitments are not honored after patent owners transfer them to others

### NIST's Smart Grid Interoperability Standards Project

#### **APPROACHES TO ADDRESSING THESE ISSUES**

- SDO policies and practices that encourage early disclosure of any known IPR applicable to the standard
- SDO policies that encourage voluntary disclosure of sample license agreements and “not to exceed” royalty rates
- SDO policies that assure irrevocability of license commitments
- Patent pools

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### The Smart Grid Interoperability Panel ([SGIP](#))

A membership-based organization created to provide an open process for stakeholders to participate in providing input and cooperating with NIST in the ongoing coordination, acceleration and harmonization of standards development for the Smart Grid. The [SGIP](#) and its governing board are an open organization dedicated to balancing the needs of a variety of Smart Grid related organizations. Any organization may become a member of the [SGIP](#).

The SGIP does not write standards, but serves as a forum to coordinate the development of standards and specifications by many standards development organizations.

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### The Smart Grid Interoperability Panel ([SGIP](#))

Membership is by organization, with one vote per participating member.

Members required to declare an affiliation with one of 22 NIST-identified Stakeholder Categories.

Participating Members must participate regularly in order to vote on the work products of the panel. The number of individual representatives who engage in [SGIP](#) technical activities is not limited.

Currently, the [SGIP](#) consists of more than 630 member organizations with almost 1,800 individual representatives engaged in [SGIP](#) activities.

# Standards Setting In US – NIST's Smart Grid Deals with IPR

## SGIP By-Laws Address IPR

### 2.6 *Intellectual Property*

The SGIP policy related to intellectual property is based on the following principles:

- a. The SGIP, the SGIPGB, all committees and all working groups and subgroups function in an **open working environment**. The SGIP and its Members **will not accept any documentary or oral disclosure of proprietary information** from any Member as a part of the SGIP's conduct of business. In addition, **no information of a secret or proprietary nature will be made available to the SGIP as official documents**, and no such documents (or documents marked as such) will be made SGIP official documents or forwarded to the membership.
- b. All **proprietary information** which may nonetheless be publicly **disclosed** by any participant **during any meeting** of the SGIP, the SGIPGB or its committees or working groups will be **deemed to have been disclosed on a non-confidential basis**, without any restrictions on use by anyone, except that **no valid copyright or invention right will be deemed to have been waived by such disclosure**.

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### SGIP By-Laws Address IPR

#### 2.6.1 *SGIP patent policy - Inclusion of Patents in SGIP-Identified Products*

*Some SGIP-identified product **may include the use of an essential patent claim** (one whose use would be required for compliance with that standard) **if technical reasons justify this approach**. If SGIP receives a notice that a proposed or an approved SGIP product may require the use of such a patent claim, the procedures in the following sections will be followed.*

# Standards Setting In US – NIST's Smart Grid Deals with IPR

## SGIP By-Laws Address IPR

### 2.6.2 *Statement from patent holder*

The *SGIP* will request from the patent holder or a party authorized to make assurances on its behalf, in written or electronic form an assurance that a license to such essential patent claim(s) will be made available to applicants desiring to utilize the license for the purpose of implementing the SGIP product either:

- a. On a non discriminatory basis and under reasonable terms and conditions; or
- b. Without compensation and under reasonable terms and conditions that are demonstrably free of any unfair discrimination.

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### SGIP By-Laws Address IPR

#### 2.6.2 *Statement from patent holder (cont.)*

*If the patent holder or party authorized to make assurances on its behalf does not agree to these terms, then this decision will be documented clearly. As it may pose risks to the implementation of the Smart Grid, this decision will be seriously considered by the SGIP in any related activity or vote.*

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### SGIP By-Laws Address IPR

#### 2.6.2.2 *Notice*

When the SGIP receives from a patent holder the assurance set forth in 2.6.1 above, the expected result will include a note substantially as follows:

**NOTE – The user's attention is called to the possibility that compliance with this expected result may require use of an invention covered by patent rights.**

By publication of SGIP expected results, **no position is taken with respect to the validity** of any such claim(s) or of any patent rights in connection therewith. **If a patent holder has filed a statement of willingness to grant a license under section 2.6.1, details may be obtained from the patent holder.**

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### SGIP By-Laws Address IPR

#### 2.6.2.3 *Responsibility for identifying patents*

Neither the SGIPGB nor SGIP is responsible for identifying patents for which a license may be required for use of an SGIP expected result or for conducting inquiries into the legal validity or scope of those patents that are brought to their attention.

## Standards Setting In US – NIST’s Smart Grid Deals with IPR

### SGIP By-Laws Address IPR

#### 2.6.3 *Copyrights*

Copyright in materials produced prior to Membership in the SGIP remains the property of the copyright owner. However, **copyrighted materials offered for incorporation into SGIP outputs must be made available on a royalty-free basis**. Members who contribute to SIGP outputs are requested to assign copyright to NIST so that NIST may place them in the public domain.

**Standards developers whose standards are referenced in SGIP outputs retain copyright ownership and control of the standards themselves.**

## Standards Setting In US – NIST's Smart Grid Deals with IPR

### SGIP By-Laws Address IPR

*[Note: IPR content is under review and may require future substantive changes to section 2.6.]*

<http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/SGIP>

## Standards Setting Ex-US – China’s SAC Deals with IPR

“Standardization Administration of the People's Republic of China (SAC) was established in April 2001 and authorized by the State Council to exercise administrative responsibilities by undertaking unified management, supervision and overall coordination of standardization works in China.”

“SAC represents China to join the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) and other international and regional standardization organizations; SAC is responsible for organizing the activities of Chinese National Committee for ISO and IEC; SAC approves and organizes the implementation of international cooperation and exchanging projects on standardization.”

<http://www.sac.gov.cn>

# Standards Setting Ex-US – China's SAC Deals with IPR

## Main Responsibilities of SAC

- 1.To draft and revise the state laws and regulations on standardization, to formulate and implement the policies on standardization; to formulate the national administrative rules on standardization and develop relevant systems; to organize the implementation of laws, rules and systems on standardization;
- 2.To be responsible for formulating the development programs on standardization of China; to organize, coordinate and draft the programs on the development and revision of national standards;
- 3.To be responsible for organizing the development and revision of national standards; to be responsible for the examination, approval, numbering and publication of national standards;
- 4.To be responsible for the management of the funds used for developing and revising national standards and the funds specially used for research on standards and standardization activities;
- 5.To manage and guide the scientific & technical work related to standardization as well as the dissemination, education and training concerned;
- 6.To be responsible for coordinating and administering national technical committees of standardization concerned;
- 7.To be responsible for coordinating and guiding sector and local standardization work; to be responsible for registration of sector and local standards;

# Standards Setting Ex-US – China's SAC Deals with IPR

## Main Responsibilities of SAC (cont.)

8. To represent China to join the International Organization for Standardization (ISO), International Electrotechnical Commission (IEC) and other international and regional standardization organizations; to be responsible for organizing the activities of Chinese National Committee for ISO and IEC; to be responsible for organizing domestic sectors and local areas to participate in the international or regional activities on standardization; to be responsible for signing and implementing international cooperation agreements in standardization field, and to examine, approve and organize the implementation of international cooperation and exchanging projects on standardization; to be responsible for the examination and approval of the participation of international activities related to standardization;
9. To administer the work of national systems of organizational entity codes and commodity bar codes;
10. To be responsible for dissemination, implementation and popularization of national standards; to supervise the implementation of national standards;
11. To administer national information work on standardization;
12. To carry out the notification and inquiry work of standards stipulated by WTO/TBT Agreement;
13. To Undertake other tasks assigned by General Administration of Quality Supervision Inspection and Quarantine of the people's Republic of China(AQSIQ).

# SAC's interim Regulations for the Administration of the Formulation and Revision of Patent-Involving National Standards

The cover page to one of the unofficial translations states the strategic importance of the document:

*“With a view to properly handling the patent issues involved in national standards, standardizing the disposal of patents involved in the process of formulating and revising national standards, encouraging independent innovations, promoting the rational adoption of new technologies in national standards, protecting the rights and interests of social public, patentees and related right holders and ensuring the effective implementation of national standards . . .”*

# SAC's interim Regulations for the Administration of the Formulation and Revision of Patent-Involving National Standards

## *Article 8*

*A patentee and its affiliate taking part in the drafting of a standard will be deemed as having granted a free license by failing to make disclosure as required above and shall bear due legal responsibility for the losses caused to the formulation or implementation of a national standard by their purposeful concealment of the patent information.*

## *Article 13*

*For a compulsory national standard that indeed needs to involve a patent, the patentee shall grant license free of charge or the national administration department of standardization shall request the related departments to consult with the patentee about disposal of the patent. If the related departments fail to agree with the patentee on the disposal of patent, the approval for release of the national standard will be temporary withheld or a compulsory license will be granted according to law.*

# SAC's interim Regulations for the Administration of the Formulation and Revision of Patent-Involving National Standards

## *Article 9*

*When a patent is involved during the formulation and revision of a national standard, PSTC or UIC shall obtain in time the patentee's irrevocable written statement on patent licensing.*

*The statement shall include the following, from which the patentee shall select one item:*

*(1) The patentee agrees to license, on a free-of-charge, reasonable and nondiscriminatory basis, to any organization and individual to implement the patent when implementing the national standard;*

*(2) The patentee agrees to license, on a reasonable and nondiscriminatory basis, any organization and person to implement the patent when implementing the national standard at a price significantly lower than the normal royalties;*

*(3) The patentee does not agree to license patent in either of the two ways listed above.*

*If the patentee has selected (3) above, the standard shall not contain any provisions based on the patent.*

Thank You

## The U.S. Standards System and Intellectual Property Rights

***QUESTIONS?***

**Henry Wixon**

Chief Counsel for NIST

301-975-2803

henry.wixon@nist.gov