# **Recent Patent Case Law Affecting Technical Standards**

by Marc Sandy Block<sup>1</sup>

#### I. Introduction

Business and technical factors, and law cases that directly involve standards, are often considered in drafting and assessing standards policies, in contributing patent technology to a standard, in determining the risks of participating in a standards effort, and in understanding the changing standards landscape. This paper considers a number of recent U.S. Supreme Court and Federal Circuit decisions relating to patents that, though they do not necessarily implicate a technical standard, may also be useful in these endeavors.

The paper focuses generally on decisions rendered in the last few years and largely confines itself to appellate patent case law developments, some of which reflect significant new directions in patent law.

For each case, this paper provides (a) a background that generally discusses the related legal concept, (b) an analysis of the decision in the case, and (c) a brief discussion of how the case might affect practices related to technical standards.

The effect or applicability of the cases in a particular standards context should be discussed with counsel.

#### **II. Case Reviews**

#### 1. Injunction:

<u>Background</u>: Patent holders, SDOs, standards developers, and standards implementers are all interested in when injunctions for patent infringement may be asserted against standardized products. An injunction is an equitable remedy in which one party can, through court action, stop another from engaging in a prescribed act(s). This equitable remedy may be in addition to the legal remedy of money damages. A permanent injunction is awarded after a court hears a case and decides that a party should be precluded from certain behavior, such as patent infringement. The Federal Circuit, over the years, applied a near-automatic rule of awarding an injunction when a patent was held valid and infringed.

<sup>1</sup> Marc Sandy Block is a staff counsel at IBM Corporation. Any opinions are those of the author and not necessarily those of his employer. © Copyright MSBlock 2008.

<sup>2 &</sup>quot;Technical standards" refer to standards adopted by one or more industries to provide a common process, protocol, infrastructure, or other technology that is or will be used by many industry participants.

<u>eBay Inc. v MercExchange LLP</u>, 547 U.S. 388 (2006): MercExchange owns a patent on an invention that facilitates the sale of used or collectible goods on the Internet. It sought a permanent injunction to stop eBay and a subsidiary from infringing the patent. The Federal Circuit, finding the patent valid and infringed, granted MercExchange an injunction. The Supreme Court, disagreeing with the Federal Circuit's near-automatic rule and vacating and remanding the injunction ruling back to the lower courts, found that injunctions for patent infringement should adhere to the same four-factor test applied to permanent injunctions in general. The Court held:

That test requires a plaintiff to demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law are inadequate to compensate for that injury; (3) that considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the *public interest* would not be disserved by a permanent injunction.

In <u>Voda v. Cordis Corporation</u>, 03-CV-1512 (decided August 18, 2008), the federal circuit upheld a district court that required the patent owner to be injured; injury to an exclusive licensee did not support injunction.

Standards Effect: Permanent injunctions, that may have been granted in the past, are often now denied to non-competitors and non-practicing entities ("NPEs") – i.e., entities that license patented technology but do not make, use or sell patented inventions. Such entities have difficulty showing "irreparable injury" and "inadequate remedies at law" (i.e., that money is not adequate). In the standards world, a number of NPEs have recently asserted patents against standards. Generally, NPEs do not participate in standards and/or claim not to be bound by any RAND commitment. Where the NPE's business model typically focuses on income generation (with no need for any license back), their assertions can be particularly difficult for implementers to negotiate a settlement. The eBay decision may affect the leverage such patent assertions have on standards and implementers.<sup>3</sup> That said, however, in Commonwealth Scientific and Industry Research Organization (CSIRO) v Buffalo, 494 FSupp 2d 600 (E.D. Texas 2007), an Australian research organization was awarded an injunction against manufacturers of products at the core of the IEEE wireless LAN standards 802.11a and g. The court found that the four factors favored injunction. In assessing "public interest," the court recognized the importance of enforcing patent rights and mentioned "rare" public interest relating to health and safety concerns, but did not discuss the "public interest" in standards. How eBay affects "practicing" patent holders, if at all, remains to be seen, although the Federal Circuit has sent some cases back to lower district courts to re-consider granted injunctions.

<sup>3</sup> See Jarosz Ellis & Oliver Chapman, The Economic Implications (and Uncertainties) of Obtaining Permanent Injunctive Relief After eBay v. MercExchange, 17 Fed. Cir. B.J. 437 (2007).

## 2. Willful patent infringement and enhanced damages:

Background: Under United States law 35 U.S.Code § 284, a court can "increase damages [for patent infringement] up to three times the amount assessed" by a jury or the court. Over the years, enhanced damages have been associated with "willful infringement." In 1983, in <u>Underwater Devices Inc. v. Morrison-Knudsen Company Inc.</u>, 717 F.2d 1380 (Fed. Cir. 1983), the court held that when a potential infringer has actual notice of another's patent rights, it has a duty of care to determine if there is an infringement. "Such an affirmative duty includes, inter alia, the duty to seek and obtain competent legal advice from counsel before the initiation of any possible infringing activity." However, prior to the Seagate decision, if an accused infringer sought to avoid willfulness by relying on an attorney opinion, it faced a dilemma. By relying on the opinion in court, the accused infringer would often be waiving its attorney-client privilege. So, defendants were often buffeted between the Scylla of treble damages and the Charybdis of forfeited privilege (i.e. opening attorney-client conversations to discovery by the plaintiff).

In re Seagate Technology, 497 F.3d 1360 (Fed. Cir. 2007) (en banc): Recognizing a change in times and laws, the Federal Circuit reconsidered the law relating to willful infringement (and enhanced damages). The Federal Circuit in <u>Seagate</u> departed from <u>Underwater Devices</u> and decided that willfulness was not premised on an "affirmative duty of due care" to avoid the infringement of known patent rights or an "affirmative obligation to obtain opinion of counsel." The new standard for willfulness is whether the infringer acts at least with "objective recklessness." That is, the infringer "acted despite a high likelihood that its actions constituted infringement of a valid patent."

Further, the <u>Seagate</u> decision curtails waiver of attorney-client privilege<sup>4</sup> (at least as to trial counsel) when an accused infringer chooses to rely on "opinion of counsel" as a defense to a charge of willfulness. In the past, if a company used counsel's opinion to argue against willfulness, there was concern that it broadly waived (or lost) its attorney-client privilege. After <u>Seagate</u>, counsel's opinion regarding the patent does not, except in special circumstances, waive the attorney-client privilege or work product protection for "trial" counsel. <u>Seagate</u> extends an earlier case, <u>Knorr Bremsey Systeme Fuer</u> <u>Nutzfahrzeuge Gmbh v. Dana Corporation</u>, 383 F.3d 1337 (Fed. Cir. 2004) (en banc), in which the Federal Circuit held that "no inference that an opinion of counsel was or would have been unfavorable flows from an alleged infringer's failure to obtain or produce an exculpatory opinion of counsel. Precedent to the contrary is overruled. We therefore vacate the judgment of willful infringement and remand for re-determination, on consideration of the totality of the circumstances but without the evidentiary contribution or presumptive weight of an adverse inference that any opinion of counsel was or would have been unfavorable."

<sup>4</sup> Under attorney-client privilege, one opposing party cannot gain access to certain communications between an attorney and its client. The privilege helps enable the client to be open with its attorney, so that it can be properly represented, without fear that its statements will become known by its opponents.

Standards Effect: The Seagate Case can have a significant effect on standards. Before Seagate, if a standard or its members were formally notified of a patent, it had a duty to investigate and seek a counsel opinion before commencing infringement, in order to avoid enhanced damages. Those SDOs/implementers (with notice) who proceeded in the past without investigating and seeking a legal opinion were at risk for enhanced (treble) damages. After Seagate, an SDO and members are subject to a charge of willfulness and enhanced damages only when it is shown, by clear and convincing evidence, that its conduct is "objectively reckless." Accordingly, SDOs and implementers do not have the level of duty they had in the past. However, they might wish to consider when circumstances might be "objectively reckless." For example, is the standard satisfied when a party (i) is aware of the patent holder filing suit (or succeeding in a legal dispute) against another implementer of the standard, (ii) is aware of other implementers entering royalty agreements relating to the patent claim, or (iii) receives a proof package showing how the claim reads on the standard or implementer's product. As an aside, it would seem that an opinion of counsel can still be sought to reduce the risk of willfulness under the new standard, but the opinion should be competent, consistent, and based on facts rather than mere conclusions.<sup>7</sup>

## 3. Declaratory Judgment (DJ):

<u>Background:</u> The Declaratory Judgment Act [28 U.S.Code § 2201] provides that "in a case of actual controversy within its jurisdiction, any [federal] court...may declare the rights of an interested party..." In the patent context, a company in an actual patent infringement controversy with a patent holder need not wait to be sued – it could seek a declaration as to whether the asserted patent is invalid, unenforceable, and/or not infringed. In the past, a party could not request a DJ action on a patent to which it was licensed. If there was a license, cases held that there was no "actual controversy." Prior case law further clarified that a party could not initiate a DJ action unless there was "reasonable apprehension of suit" -- e.g. the patent holder threatened litigation.

In <u>Medimmune Inc. v. Genentech Inc.</u>, 549 U.S. 118 (2007), the Supreme Court held that a licensee need not terminate its license under threat of possible treble damages and injunction in order to challenge the validity, infringement, or enforceability of a patent by filing a declaratory judgment action. Departing from Federal Circuit case law that a

<sup>5</sup> The protection of a patent is defined by numbered paragraph(s), called "patent claims," that are drafted to clearly and distinctly indicate the limitations (components, steps, chemical elements or compounds, etc.) that together form the invention. To infringe a patent, an accused product or process must include the various limitations in the patent claim.

<sup>6</sup> In traditional licensing, a patent holder may present an alleged infringer with a side-by-side reading of each limitation of the patent claim against a corresponding element of the accused product or its documentation. This is sometimes called a "proof package."

<sup>7</sup> In <u>Acumed LLC v Stryker Corp.</u>, 483 F. 3d 800 (Fed. Cir. 2007), Stryker *willfully infringed* an Acumed "orthopedic nail" patent despite an attorney "noninfringement" opinion. The attorney previously advised that the product infringed and defendant (Stryker) sold product before the revised opinion was rendered.

license agreement "obliterates any reasonable apprehension of suit," the Supreme Court, in a footnote, rejected the Federal Circuit's "reasonable apprehension" test.

<u>Medimmune</u> progeny further obliterates the "reasonable apprehension" test and clarifies when declaratory judgment actions would be available.

In the first such case, <u>Sandisk Corporation v. STMicroelectronics</u>, <u>Inc.</u>, 480 F.3<sup>rd</sup> 1372 (Fed. Cir. 2007), the Federal Circuit repudiated the "reasonable apprehension of suit" test for DJ jurisdiction. An invitation to license – i.e. the presentation of an infringement analysis and a royalty request – was held to be enough to support a DJ. In the second case, <u>Adenta Gmbh v. Orthoarm</u>, <u>Inc.</u>, 501 F.3d 1364 (Fed. Cir. 2007), a patent owner's "expressed intent to pursue legal remedies if the licensee refused to continue to pay royalties" was sufficient to create a substantial controversy warranting declaratory relief. Finally, in <u>Micron Technology</u>, <u>Inc.</u>, <u>v. Mosaid Technologies</u>, <u>Inc.</u>, 518 F.3d 897 (Fed. Cir. 2007), the Federal Circuit overturned a dismissal of a DJ action in California based on Mosaid's filing of an infringement action one day later in a Texas court. The district court wrongly relied on the "reasonable apprehension of suit" test and should have given more weight to "convenience factors" in selecting the forum (e.g. the Mosaid U.S. operation was based in California).

Standards Effect: As a result of <u>MedImmune</u>, a standards implementer may secure and retain a RAND license and still question the need for it. For standards implementers, this means launching attacks from a safe bunker. For patent holders, it could mean loss of leverage where the licensee can challenge the patent and be secure that, even if it loses, it ends up where it began – with its license. An open question is how, if at all, the parties may affect their respective rights by agreement.

4. Equivalents: A court-made doctrine provides that a patent claim can extend beyond its literal language to pick up "equivalents" of claim limitations. "Equivalents" traditionally perform substantially the same function in substantially the same way to achieve substantially the same result as a literal claim limitation. With this doctrine, trivial variations do not escape infringement. In standards, the existence of "equivalents" makes the identification of "essential patent claims" -- that is, claims that are necessarily infringed by a standard – less certain. A patent holder might consider a claim to be non-essential because the claim includes an express limitation that differs from what is in the standard. If what is in the standard is found to be an "equivalent" of what is recited in the patent claim, the claim might then be deemed "essential." This uncertainty has been raised as a reason why standards development organizations (SDOs) should not impose robust (disclosure) commitments on participants or robust consequences for failure to make disclosure.

<sup>8</sup> Typically, it is the patent holder who argues for an "equivalent" to expand the breadth of its claim. The author, however, is not aware of any cases that preclude a standards implementer from asserting "equivalents" to bring a claim under a disclosure or RAND licensing commitment. Some measures could, in certain circumstances, be taken by a patent holder to limit its claim and avoid the commitment.

Honeywell Int'l Inc. v Hamilton Sundstrand Corp., 523 F.3d 1304, (Fed Cir. 2008): A patent holder did not show that an "alleged equivalent" was "unforeseeable" or that the amending of a claim limitation was "merely tangential." The court did not recognize the alternative as an "equivalent."

The <u>Honeywell</u> case tracks Supreme Court decisions that serve to shrink the scope of "equivalents," namely <u>Warner-Jenkinson Co. v Hilton Davis Chemical Co.</u>, 520 US 17 (1997), and <u>Festo Corp. Shoketsu Kinzoku Kogyo Kabushiki Co.</u>, 535 U.S. 722 (2002). These cases provide that revisions to a claim limitation entered to make a claim patentable are surrendered if the subject matter was foreseeable at the time the amendment was made. If the subject matter (alternative) is foreseeable, the amendment should have included or addressed it. If the subject matter is unforeseeable, the Court observes that the "equivalent" is not surrendered. Moreover, <u>Festo</u> recognizes that claim limitation revisions that are tangential to substantive patentability do not result in equivalents thereto being relinquished.

<u>Discussion:</u> While "equivalents" still provide some cloud around a claim, the cases have shrunk the uncertainty as to whether a claim is or is not "essential." Hence, while there is still some difficulty in complying with a duty to disclose "essential claims," it has been lessened. For those involved in drafting/revising SDO policies, these cases may help in considering issues relating to the scope of patent disclosure commitments.<sup>9</sup>

## 5. Combining Prior Art References to Show That An Invention is Not Patentable:

To be patentable in the United States, an invention must "not be obvious to one of ordinary skill in the art to which the invention pertains." <sup>10</sup> Obviousness can be shown by combining multiple pieces of prior art (as defined in 35 U.S.C.§ 102), such as publications, patents, and products. Over the years, the Federal Circuit developed a rule that, in order to combine two or more pieces of prior art, there must be a "teaching, suggestion, or motivation" ("TSM") to combine them. Without a showing of TSM, two references that together taught all the limitations of the claimed invention might not be combined to show obviousness under prior Federal Circuit precedent.

**KSR International Co. v. Teleflex Inc.,** 127 S. Ct. 1727 (2007): In this case, the invention involves a vehicle pedal (like an accelerator pedal) that could be "moved fore or aft" to adjust for a driver's leg length, where the movable pedal mechanism pivots about an axis that remains stationary (does not move with the pedal). An electronic sensor for determining the angular position of the pedal mechanism about the axis is also stationary. The question was whether a stationary pivot and electronic sensor from a

<sup>9</sup> This discussion addresses the "equivalents" issue. Other issues may arise as to the scope of the disclosure obligation, if the SDO includes one in its policy, such as what circumstances trigger the obligation. The ABA Standards Development Patent Policy Manual discusses this in detail.

<sup>10 35</sup> U.S.C. §103

<sup>11</sup> A video prepared by the defendant to show the various mechanisms can be viewed at <a href="http://www.friedfrank.com/index.cfm?pageID=41&itemID=1050&scID=65">http://www.friedfrank.com/index.cfm?pageID=41&itemID=1050&scID=65</a>

The site also provides other papers relating to the case.

General Motors reference could be combined with the slidable pedal of an Asano reference to render the claimed invention obvious. The Federal Circuit did not find a teaching-suggestion-motivation (TSM) for the combining. The Supreme Court, however, rejecting the rigid TSM rule of the Federal Circuit, reverted to basic language of nonobviousness and concluded that "mounting a modular sensor on a fixed pivot point of the Asano pedal was a design step well within the grasp of a person of ordinary skill in the relevant art." While TSM may support the combining of prior art references, it is not the only test. In reexamining the nonobviousness standard, the Court concluded that any problem in the technical field may be considered a reason for combining references. A "familiar" prior art device is not limited in its future use to the problem it was originally intended to solve. The Court also breathed life into proving obviousness when it would be "obvious to try the combination." The Court finally noted that the lower court "drew the wrong conclusion from the risk of courts and examiners falling prey to hindsight...Rigid preventative rules that deny recourse to common sense are neither necessary, nor consistent with, this Court's case law."

<u>Discussion:</u> While the impact of the <u>KSR</u> decision is yet to be seen, it has the potential of reducing the number of patents that are allowed and successfully asserted against standards, where the combined teachings of multiple prior art references add up to the claimed invention. In an interesting successor case citing <u>KSR</u>, <sup>12</sup> the Federal Circuit, in vacating a lower court decision granting one, denied a preliminary injunction to a patent holder, <sup>13</sup> noting that: "it is reasonable to infer that one of ordinary skill would have considered the OBO Betterman hook coupled with the EIA standards and common knowledge within the art...to explain that Claim 17 is vulnerable..." to obviousness and hence not patentable.

6. Standards Documents as Prior Art: Under U.S. law, patent protection is denied if the invention is in a publication that is readily accessible by the public, as opposed to a private communication. In the standards field, there are minutes, documents, and draft specifications generated by an SDO and its working groups. Whether those documents can serve as prior art against patents asserted against standards implementers may depend on how the document is treated and distributed.

SRI International Inc v. Internet Security Systems Inc., 511 F.3d 1186 (Fed. Cir. 2008): A number of patents related to the Internet were alleged to be invalid in view of a prior technical paper. However, there was "insufficient evidence to show that paper was publicly accessible through a printed publication as required under § 102(b). The live traffic paper was placed on a server but the server could not be accessed by the researching public and the paper was placed on the server solely to facilitate peer review." The court vacated a summary judgment of invalidity against the patents.

<sup>12</sup> Erico Intl. Corp. v Vutec Corp., 516 F 3d 1350 (Fed. Cir 2008).

<sup>13</sup> In a preliminary injunction, a patent holder tries to stop the accused infringer's acts before the case is heard. One requirement for this injunction is "likelihood of success on the merits of the case".

<u>Discussion:</u> Standards documents can serve as prior art if they are available to the public. Some SDOs keep draft documents confined to a limited group of developers for various purposes – e.g. not making public downlevel versions of the specification that may be misinterpreted. In considering how to treat such documents, SDOs should consider whether they wish to benefit from use of these documents as prior art. <sup>14</sup>

7. Patent Exhaustion: The acquisition of a patented product from a patent holder or its licensee exhausts the patent holder's rights in the product. Incorporated in the product purchase is recognition that the patent holder has received its royalty tribute. The topic of exhaustion raises numerous issues especially when exhaustion arises through acts of an authorized licensee. Can a patent holder, in the license agreement, impact exhaustion with respect to its licensee's customers? If a component sold by a licensee has no noninfringing use other than in a second product, how (if at all) does patent exhaustion apply to a patent on the second product?

Quanta Computer Inc. v LG Electronics Inc., 128 S. Ct. 2109 (2008): LGE owned several computer-related patents. A patent license to Intel stated, among other things, that Intel had the right to make, use, and sell patented components (chips), but that purchasers from Intel were not covered for combining Intel components with other parties' components to make computer systems. In a separate agreement, Intel agreed to provide notice to manufacturers that the manufacturers were not covered for (patented) combinations made with licensed chips. When LGE asserted patents against system makers, the makers asserted patent exhaustion. In reversing the Federal Circuit, the Supreme Court (i) rejected the notion that method claims were not subject to exhaustion, and (ii) relied on a 1942 Supreme Court decision, <sup>15</sup> in upholding the exhaustion defense. The chips had no use other than with memory and buses in a computer system. Moreover, "everything inventive about each patent is embodied in the Intel components." As for the contention that Intel could not license more than it was authorized to sell, the Court found that there were no "conditions limiting Intel's authority to sell products substantially embodying the patents. Because Intel was authorized to sell its products to Quanta, the doctrine of patent exhaustion prevents LGE from further asserting its patent rights..."

<u>Discussion:</u> Standards are typically built around interoperation and the combining of products with other products and/or features downstream. The Court's robust view of patent exhaustion may affect the ability of patent holders to receive multiple payments from multiple downstream implementers of standards. How patent holders may respond to this decision remains to be seen.

<sup>14</sup> Recently, the European Patent Office asked an SDO (ETSI) to restructure its database to make it easier to search for prior art.

<sup>15</sup> In <u>U.S. v. Univis Lens Co. Inc.</u>, 316 U.S. 241 (1942), the sale of eyeglass lens blanks, which could only be used to make finished lenses, exhausted patents that read on the finished lenses. The Court observed that the blank lenses "only and intended use is to be finished under the terms of the patent."

8. Patent Market Power and Antitrust: Inside and outside the standards environment, antitrust allegations have been raised in response to certain patent holder conduct. Often the elements of an antitrust violation depend on a showing of "market power." That is, an antitrust violation may depend on whether the accused party dominates a product or technology market – i.e., has "market power" -- so that its acts prevent entry into the market or injure competition. For example, in the Philips matter before the ITC, antitrust allegations were made against a patent pool's licensing policy in which non-essential patent claims were allegedly licensed, as a package, along with essential patent claims. The ITC found an illegal tying arrangement, but the ITC was later reversed by the Federal Circuit. U.S. Philips Corporation, v. International Trade Commission, 424 F.3d 1179 (Fed. Cir. 2005).

Illinois Tool Works Inc., v. Independent Ink, Inc., 547 U.S. 28 (2006): Independent Ink sold, to printer manufacturers, unpatented ink and printing components covered by its patents. The sale was subject to a proviso that the manufacturers purchase ink only from Independent. Illinois Tool filed an antitrust claim for tying, alleging that unpatented ink was illegally tied to the patented components. The Supreme Court held that the "mere fact that a tying product was patented does not necessarily confer market power upon patentee, so that such market power had to be proved, rather than presumed." The Court observed that prior precedent that supported the presumption was undermined by a 1988 revision to the patent laws at 35 U.S.C. § 271(d)(5) that limits when patent misuse can be charged. Under this statute, no patent owner shall be deemed guilty of patent misuse or extension of patent rights for "(5) condition[ing] the license of any rights to the patent or the sale of the patented product on the acquisition of a license to rights in another patent or purchase of a separate product, unless, in view of the circumstances, the patent owner has market power in the relevant market for the patent or patented product on which the license or sale is conditioned." The case was returned to the lower court where Illinois Tool would have to prove "market power" to show illegal tying.

<u>Discussion:</u> In the standards environment, the case suggests that patent holders and patent pools are less vulnerable to antitrust tying charges. Implementers would have to define a "market" and then show the "market power" of the patent holder in those cases in which market power is an element. To the extent the presumption applied outside of patent tying, <sup>17</sup> the Illinois Tool Case may have dispelled the presumption in those instances as well.

<sup>16</sup> Although Section 271(d)(5) discusses only patent misuse, the Supreme Court in *Illinois Tool* addressed a Sherman Act Section 1 (15 USCode Section 1) violation. The Court recognized that antitrust law should, like patent misuse law, require a showing of market power where a patent is involved.

<sup>17</sup> See Antitrust Law by Phillip E. Areeda & Herbert Hovenkamp, P 518 (2d ed. 2002) (early Supreme Court cases "applied the presumption [of market power for patents] only in tying cases ... at a time when the market power requirement for tying was nominal or nearly nonexistent.") See also Deborah Coleman, Antitrust Issues in the Litigation and Settlement of Infringement Claims, 37 Akron L. R 263 (2004) citing Walker Process Equip., Inc. v. Food Mach. and Chem. Corp., 382 U.S. 172 (1965) "The Supreme Court held that enforcement of a patent secured through willful and material misrepresentations to the PTO may, if the patent confers market power in a relevant market, violate Section Two of the Sherman Act."

# **III. Conclusion**

The foregoing cases outline recent thinking of the Supreme Court and Federal Circuit with respect to patents. It is hoped that the case decisions provide information that might be useful in assessing how much latitude SDOs and standards participants have in making choices, in addressing long-term issues at the patent-standard intersection, in addressing potential risks and circumstances that standards stakeholders might encounter, and in considering new proposals to keep standards practices vital in a changing environment.