

**2017-2307**

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**UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT**

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**AMERICAN VEHICULAR SCIENCES LLC,**  
*Appellant*

**v.**

**UNIFIED PATENTS INC.,**  
*Appellee*

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**Appeal From The United States Patent And Trademark Office,  
Patent Trial And Appeal Board In No. IPR2016-00364**

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**BRIEF OF AMICUS CURIAE US INVENTOR, INC. IN SUPPORT OF  
APPELLANT'S PETITION FOR REHEARING EN BANC**

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August 1, 2018

## CERTIFICATE OF INTEREST

Pursuant to Fed. Cir. R, 47.4, counsel for Amicus Curiae, US Inventor, Inc., certifies the following:

1. The full name of every party or *amicus* represented by me is: US Inventor, Inc.
2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is: US Inventor, Inc.
3. All parent corporations and any publicly held companies that own 10% or more of the stock of the party or amicus curiae represented by me are: none.
4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are:

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5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. See Fed. Cir. R. 47. 4(a)(5) and 47.5(b):  
none

/s/Keith A. Vogt  
Keith A. Vogt

## TABLE OF CONTENTS

CERTIFICATE OF INTEREST .....	i
TABLE OF CONTENTS .....	ii
TABLE OF AUTHORITIES .....	iii
STATEMENT OF INTEREST .....	1
STATEMENT OF CONSENT .....	2
ARGUMENT .....	2
CONCLUSION .....	8
CERTIFICATE OF SERVICE	
CERTIFICATE OF COMPLIANCE	

## TABLE OF AUTHORITIES

### **Statutes and Rules**

Fed. R. App. P. 29(a)(5).....	1
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### **Regulations**

Manual of Patent Examining Procedure (9th ed., rev. 08.2017), §§ 706.02 .....	3
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## STATEMENT OF INTEREST

US Inventor, Inc. ("US Inventor") is a non-profit association of inventors devoted to protecting the intellectual property of individuals and small companies.<sup>1</sup> It represents its 13,000 inventor and business members by promoting strong intellectual property rights and a predictable U.S. patent system through education, advocacy, and reform.

US Inventor was founded to support the innovation efforts of the "little guy" inventors, seeking to ensure that strong patent rights are available to support their efforts to develop their inventions, bring those inventions to a point where they can be commercialized, create jobs and industries, and promote continued innovation. Its members consist of individual inventors and small- to medium-sized enterprises that depend heavily on the value created by meaningful patent rights. Their broad experience with the patent system, new technologies, and building companies, gives them a unique perspective on the important issues presented in American Vehicular Sciences, LLC's petition for a rehearing *en banc*.

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<sup>1</sup> Under Fed. R. App. P. 29(a)(5), amici curiae certifies that no party's counsel authored this brief in whole or in part, no party or party's counsel contributed money that was intended to fund preparing or submitting the brief, and no person other than amicus curiae, its members, or its counsel contributed money that was intended to fund preparing or submitting the brief.

## **STATEMENT OF CONSENT**

All parties, in this appeal, have consented to the filing of this brief. A motion for leave to file accompanies this brief.

## **ARGUMENT**

This Court should grant Petitioner's request for rehearing *en banc* because it presents an opportunity to resolve conflicting Federal Circuit jurisprudence concerning single-reference obviousness that is undermining needed uniformity and predictability in patent validity considerations. Failing to resolve the conflict will negatively impact the small U.S. inventor—the life and blood of our economy—whose interests our patent law system is supposed to foster and protect. It is important that this Court grant the Petitioner's request for an *en banc* hearing to resolve the existing conflict in this Court's jurisprudence concerning the legal standards for single reference obviousness.

In both patent examination and litigation, patent validity challenges are being brought based on claims that a single reference renders a patent claim obvious. Nor is this an insignificant issue in the patent law. In fact, one commentator found that around 40% of PTAB institutions include a single reference obviousness theory.<sup>2</sup>

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<sup>2</sup> See A. Simpson and K. Canavera, "Inside Views: Obviousness In The Wake Of Arendi," available at <http://www.ip-watch.org/2017/12/15/obviousness-wake-arendi/>

Despite the prevalence of this reoccurring ground for asserting invalidity, as Petitioner points out, there is a lack of uniformity in the applicable legal standards used to resolve this issue. For example, Petitioner identifies many pre- and post- *KSR* decisions of this Court rejecting a claim that a single reference made an invention obvious using one set of legal standards. Petition at 2-3. There is also a line of cases from this Court affirming a single reference obviousness determination using another set of legal standards. *Id.* at 3. Even the patent bar has recognized that this Court has applied at least four different legal standards when resolving the single reference obviousness issue.<sup>3</sup> Nor does the MPEP provide guidance on how to resolve the issue. *See* Manual of Patent Examining Procedure (MPEP) (9th ed., rev. 08.2017), §§ 706.02, 2141-2144 (sections concerning obviousness that lack any subsection instructing examiners on the proper framework for a single reference modification rejection under § 103). Without the guidance only uniform legal standards can provide, uncertainty will persist at the lower courts, at the PTAB, at the PTO and with those tasked with evaluating the patentability of a promising technology.

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<sup>3</sup> *See* A. Bramhall and B. Margeson, “Sorting out Single Reference Obviousness at Fed. Cir.,” Law360.com (Jan. 22, 2018) (available at <https://www.law360.com/articles/1002322>, last accessed July 28, 2018).

Uncertainty places a disproportionate burden on the “Little Guy.” The small inventor is the true representative of the culture of innovation and ingenuity that Article I, Section 8, Clause 8 of the Constitution was meant to promote and foster. The current lack of predictability effects a direct hit on this country’s grassroots inventive ethos by disincentivizing the risk-taking and experimentation that are inherent in the inventive process, and creating uncertainty concerning the ability to determine the validity of an invention.<sup>4</sup>

The lack of uniformity in assessing validity comes at a time when the United States is facing a genuine crisis in innovation. Countries that were once net importers of advances in technology are now eclipsing the United States with respect to advances in the industries of the future. For example, in 2017, China accounted for 48% of the world's total artificial intelligence startup funding, while the United States accounted for only 38% of such funding.<sup>5</sup> China is either already leading or is becoming the world leader in quantum computing, solar cells, and other technologies that provide the foundation for several important industries,

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<sup>4</sup> See generally P. Morinville, “Crisis in American Innovation,” US Inventor, available at <http://www.usinventor.org/wp-content/uploads/2017/08/USI-Crisis-in-American-InnovationFull-Version.pdf>.

<sup>5</sup> See J. Vincent, “China overtakes US in AI startup funding with a focus on facial recognition and chips,” at 1, available at <https://www.theverge.com/2018/2/22/17039696/china-us-aifunding-startup-comparison>.

including advanced energy production and globalized currencies.<sup>6</sup> These changes are reflected in the significant difference in the number of patent applications between the two countries: by 2015 nearly twice as many patent applications were filed in China (1,101,864) as were filed in the United States (589,410).<sup>7</sup> In the first quarter of 2017, the number of angel and seed stage funding rounds in the United States dropped 62 percent.<sup>8</sup> Entrepreneurs have found it harder and harder to raise money through venture capital.<sup>9</sup>

If allowed to stand, the lack of uniformity in Federal Circuit jurisprudence will continue to harm small inventors, who are critical to the innovation ecosystem. As of about a decade ago, they hired 43 percent of America's high tech workers

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<sup>6</sup> See J. Pekkanen, "China Leads The Quantum Race While The West Plays Catch Up," at 2, available at <https://www.forbes.com/sites/saadiampekkannen/2016/09/30/china-leads-the-quantumrace-while-the-west-plays-catchup/#b14212592856>; M. Meng, "With high-performance cells, China takes aim at high-end solar market," available at <https://www.reuters.com/article/us-chinasolar-cost-analysis/with-high-performance-cells-china-takes-aimat-high-end-solar-market-idUSKCN1BP0X6>.

<sup>7</sup> WIPO, "Global Patent Applications Rose to 2.9 Million in 2015 on Strong Growth From China; Demand Also Increased for Other Intellectual Property Rights," at 1, available at [http://www.wipo.int/pressroom/en/articles/2016/article\\_0017.html](http://www.wipo.int/pressroom/en/articles/2016/article_0017.html).

<sup>8</sup> See M. Kendall, "Silicon Valley investing slump continues, fewer startups get funded," at 4, available at <https://www.siliconvalley.com/2017/04/04/silicon-valley-investing-slumpcontinues-fewer-startups-get-funded/>.

<sup>9</sup> *Id.*

(e.g., scientists, engineers, computer programmers), produced 16.5 times more patents per employee than large patenting firms, generated 65 percent of net new jobs over the previous 17 years, and made up 97.5 percent of all identified U.S. exporters.<sup>10</sup>

Small inventors often lack the resources or manufacturing ability to develop their inventions themselves. They often rely on investment such as seed funding to pay for the significant costs of patent prosecution and for engaging in further experimentation, discovery, and invention development. Both “sellers” and “buyers” depend upon uniform legal standards to make informed investment decisions.

Doubt as to how a single reference may be used to challenge an invention is no friend to the patent community. It makes it more difficult for a small inventor to decide whether to pursue developing a technology. It increases the risk of investing since it makes it more difficult for an investor to make an investment decision based upon the patentability of a technology. Moreover, the increased risk may also increase the cost of any funding obtained by an inventor. Uncertainty has an overall chilling effect on the ability of small inventors to use their intellectual

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<sup>10</sup> Small Business Administration, Office of Advocacy: The Voice of Small Business in Government (updated Jan. 2011), *available at* <https://www.sba.gov/sites/default/files/sbfaq.pdf>.

property rights as a basis for attracting businesses that may be interested in those innovations, and in partnering, collaborating, or investing in them.

Even during prosecution, the uncertainty surrounding the single reference obviousness issue may harm the small inventor. First, clear guidance from this Court may avoid the issuance of a rejection during prosecution thereby lowering a small inventor's overall patent expenses. Second, even after receiving a single-reference obviousness rejection, a patentee with no clear guidance to use to formulate a response, may need to address all legal standards articulated by this Court just to be safe. This, too, increases costs. Federal Circuit law in its current state makes it difficult to prevent and move examiners away from using well-intentioned (yet incorrect) hindsight reasoning during the examination process. Granting the Petition offers a singular opportunity to restore rigor to examination to help examiners properly issue quality patents without excessive cost to small inventors.

Small inventors face numerous challenges and obstacles these days, and a dependable and clear way to assess patentability is an essential for them to be able to survive and thrive. Guesswork should be removed from the calculus of determining what impact a single reference may have on a technology. Inventors, investors and any other stakeholders deserve clear guidance that can only come

from the resolution of the lack of uniformity in this Court's jurisprudence as to the legal standards concerning single reference obviousness.

## **CONCLUSION**

Before this Court is an opportunity to resolve a split in its jurisprudence by granting Petitioner's request for a rehearing *en banc*. Doing so will promote a uniform body of patent law that provides the "Little Guy" and others with the ability to make sound decisions about an invention so they may continue to engage in meaningful technology transfer and commercialization that rewards innovation, enhances competition, and brings improved products to the marketplace.

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

In accordance with Federal Rule of Appellate Procedure 25 and Federal Circuit Rule 25, I hereby certify that on the 1st day of August, 2018, I electronically filed the foregoing BRIEF OF AMICUS CURIAE US INVENTOR, INC. IN SUPPORT OF APPELLANT'S PETITION FOR REHEARING EN BANC using the CM/ECF system of the Court, which will send a notice of electronic filing to all registered counsel.

August 1, 2018

/s/ Keith A. Vogt  
Keith A. Vogt

## **CERTIFICATE OF COMPLIANCE**

This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) and Fed. R. App. P.29(d). This brief contains 1,598 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii) and Fed. Cir. R. 32(b).

The brief complies with the typeface requirements of Fed. R. App. P.29 and Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally-spaced typeface using Microsoft Word 2010 in 14-point Times New Roman type.

August 1, 2018

/s/ Keith A. Vogt  
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