



**U.S. Citizenship
and Immigration
Services**

**Non-Precedent Decision of the
Administrative Appeals Office**

In Re: 5808571

Date: NOV. 21, 2019

Appeal of Texas Service Center Decision

Form I-140, Immigrant Petition for Alien Worker (Extraordinary Ability)

The Petitioner, an engineer in the materials science field, seeks classification as an individual of extraordinary ability. *See* Immigration and Nationality Act (the Act) section 203(b)(1)(A), 8 U.S.C. § 1153(b)(1)(A). This first preference classification makes immigrant visas available to those who can demonstrate their extraordinary ability through sustained national or international acclaim and whose achievements have been recognized in their field through extensive documentation.

The Director of the Texas Service Center denied the petition, determining that the Petitioner did not establish that she meets at least three of the ten initial evidentiary criteria for this classification.

In these proceedings, it is the Petitioner's burden to establish eligibility for the requested benefit. *See* Section 291 of the Act, 8 U.S.C. § 1361. Upon *de novo* review, we will dismiss the appeal.

I. LAW

Section 203(b)(1) of the Act makes visas available to immigrants with extraordinary ability if:

- (i) the alien has extraordinary ability in the sciences, arts, education, business, or athletics which has been demonstrated by sustained national or international acclaim and whose achievements have been recognized in the field through extensive documentation,
- (ii) the alien seeks to enter the United States to continue work in the area of extraordinary ability, and
- (iii) the alien's entry into the United States will substantially benefit prospectively the United States.

The term "extraordinary ability" refers only to those individuals in "that small percentage who have risen to the very top of the field of endeavor." 8 C.F.R. § 204.5(h)(2). The implementing regulation at 8 C.F.R. § 204.5(h)(3) sets forth a multi-part analysis. First, a petitioner can demonstrate sustained acclaim and the recognition of his or her achievements in the field through a one-time achievement

(that is, a major, internationally recognized award). If that petitioner does not submit this evidence, then he or she must provide sufficient qualifying documentation that meets at least three of the ten categories listed at 8 C.F.R. § 204.5(h)(3)(i) – (x) (including items such as awards, published material in certain media, and scholarly articles).

Where a petitioner meets these initial evidence requirements, we then consider the totality of the material provided in a final merits determination and assess whether the record shows sustained national or international acclaim and demonstrates that the individual is among the small percentage at the very top of the field of endeavor. *See Kazarian v. USCIS*, 596 F.3d 1115 (9th Cir. 2010).

II. ANALYSIS

The Petitioner is an engineer in the field of materials science, research and development. After completing her bachelor's degree in chemical and electrochemical engineering in India, she received her master of science in materials engineering and science at the [redacted] School of Mines and Technology in 2008, and her Ph.D. in materials science and engineering from [redacted] University in 2013. At the time of filing, she was employed as an innovation engineer with [redacted] [redacted] and previously worked for the [redacted] group in India and Sweden since 2014.¹

A. Evidentiary Criteria

Because the Petitioner has not indicated or established that she has received a major, internationally recognized award, she must satisfy at least three of the alternate regulatory criteria at 8 C.F.R. § 204.5(h)(3)(i)-(x). The Director found that the Petitioner met two of the evidentiary criteria at 8 C.F.R. § 204.5(h)(3)(i)-(x), relating to participating as a judge of the work of others in her field and publication of scholarly articles. On appeal, the Petitioner asserts that she also meets the evidentiary criteria relating to original contributions and leading or critical roles. After reviewing all of the evidence in the record, we find that the Petitioner has not established that she meets at least three criteria.

Evidence of the individual's participation, either individually or on a panel, as a judge of the work of others in the same or an allied field of specialization for which classification is sought. 8 C.F.R. § 204.5(h)(3)(iv)

We agree with the Director's determination that the Petitioner satisfied this criterion. The Petitioner submitted evidence that she provided services as a peer reviewer for *Electrochimica Acta*, *Journal of Applied Polymer Science*, and *Journal of Metals*.

Evidence of the individual's original scientific, scholarly, artistic, athletic, or business-related contributions of major significance in the field. 8 C.F.R. § 204.5(h)(3)(v)

¹ The record reflects that [redacted] offered the Petitioner a position as a materials engineer in November 2018 and that she has since left the [redacted]

In order to fulfill the regulation at 8 C.F.R. § 204.5(h)(3)(v), a petitioner must establish that not only has she made original contributions but that they have been of major significance in the field.² For example, a petitioner may show that the contributions have been widely implemented in the field, have remarkably impacted or influenced the field, or have otherwise risen to a level of major significance in the field.

Although the Petitioner provided evidence reflecting the novelty of her research through recommendation letters praising her for her original contributions, we agree with the Director's finding that the authors do not provide specific examples of scientific contributions that are indicative of major significance.

The Petitioner identifies four contributions that she claims have made an impact in the field of materials science and engineering. The first relates to her research in the areas of [redacted] and nanofibers, conducted while she was a master's student at the [redacted] School of Mines.³ The Petitioner provided a letter from [redacted] who states that she "has made significant and respected original contributions" to the fields of nanotechnology and nanomaterials. He explains that one of the Petitioner's research projects at the school involved preparing a recipe and process parameters to obtain defect free 10 nm [redacted] particles. He notes that the Petitioner "was the first ever to achieve a 10 nm particle." [redacted] further states that, based on the results of the Petitioner's research, "we established the recipe for new materials for synthesizing nanofibers in our laboratory." While he explains the value of nanofiber technology and its applications and indicates that the Petitioner's achievement of a 10 nm particle was notable, he does not explain with specificity how the [redacted] technique the Petitioner used has impacted the nanomaterials field as a whole or whether it has been widely implemented. Rather, he indicates that the Petitioner's results impacted subsequent work at the particular laboratory in which she performed her research. In addition, while [redacted] notes that her work has been cited by other researchers from all over the world, he does not specify the impact of her work on others in the field.

On appeal, the Petitioner submits an additional letter from [redacted], a professor at [redacted] School of Mines who states that he advised the Petitioner on her research at the university. Referring to the same project as [redacted] he explains that the Petitioner "performed fundamental studies to make metal matrix composites using [redacted] nanofibers," and notes that it "is a significant and unique contribution as it aids in the structure-property relationship development of these alloys." Finally, [redacted] states that "these lightweight metal matrix composites have numerous applications throughout the civil and defense aerospace industries because of the weight savings over comparably strong materials." [redacted]'s letter attests to the originality of the Petitioner's research, but does not speak specifically regarding its impact in the field. For example, it is unclear if he is stating that her research has already been applied throughout the civil and defense industries, or whether he expects it to be widely applied by materials scientists working in those industries in the

² See USCIS Policy Memorandum PM 602-0005.1, *Evaluation of Evidence Submitted with Certain Form I-140 Petitions; Revisions to the Adjudicator's Field Manual (AFM) Chapter 22.2, AFM Update AD11-14 8-9* (Dec. 22, 2010), <https://www.uscis.gov/policymanual/HTML/PolicyManual.html> (finding that although funded and published work may be "original," this fact alone is not sufficient to establish that the work is of major significance).

³ In his letter, [redacted] explains that [redacted] as "a nanomaterials processing technology that can produce polymer, ceramic, metallic, and carbon/graphite fibers" with superior structural and mechanical properties that make them both cost effective and easier to process into applications in comparison with other nanomaterials.

future. The Petitioner did not provide corroborating evidence showing that this research had already made an impact on the field.

The Petitioner also provided the citation history for her 2009 article “Fabrication and characterization of [redacted] nanofibers” (*Journal of Materials Science*), which, according to Google Scholar is her most cited publication. While this evidence confirms that other researchers have cited her work in their own publications, it does not establish how the techniques proposed by the Petitioner have influenced the field in a significant way or how they have been widely implemented. The record does not contain evidence of other papers that cited the Petitioner’s research or evidence showing the academic or practical application of her research.

The second contribution the Petitioner highlights is her research on the development of lightweight alloys, also conducted while she was a graduate student at the [redacted] School of Mines. [redacted] notes that she worked on a project funded by the U.S. Air Force Research Laboratory, and states that the Petitioner “developed the lightweight [redacted] metal matrix composite.” He notes that this was “the first time nanomaterial was used in [redacted] processing” and noted that her contribution resulted in material that was at least 25% stronger than commercially available nanopowder, and which “continued materials advancement of US defense equipment in terms of economy and effectiveness.” Both [redacted] and [redacted] state that the results of the Petitioner’s research in this area led to the university’s receipt of additional funding from the U.S. Air Force research laboratory. While both letters speak to the Petitioner’s original contribution, the letters do not detail how this contribution was of major significance or its impact on subsequent work. The letters indicate that she contributed to the [redacted] School of Mines’ ability to obtain funding for continued research, but the Petitioner has not established how this research has impacted the nanomaterials field on a wider basis. [redacted]’s reference to the advancement of materials used in U.S. defense equipment is noted, but the record does not link the Beneficiary’s research to that advancement and he does not further explain the impact it has had.

The Petitioner has also submitted evidence that highlights research she has conducted as a doctoral student at [redacted] University’s [redacted]. [redacted] states that he was the principal investigator for an Air Force-funded project on which the Petitioner worked - [redacted] Residual Stress Measurement.” He explains that the purpose of the project was to identify an inexpensive, mobile, nondestructive measurement of residual stress on [redacted] engines. [redacted] notes that the Petitioner performed the fundamental study of the superalloy [redacted] by subjecting it to various heat treatments and stress levels through both [redacted] and [redacted] methods, and indicates that “[t]his project ... created a stir and made waves of follow-up research toward the use of the [redacted] as a nondestructive means to observe any changes in microstructure of the material without destroying the components.” [redacted] a former research assistant at [redacted] also discusses the Petitioner’s research, noting that she “received critical acclaim at the Review of Progress in [redacted] conference in 2011.” [redacted] describes the Petitioner’s work on quantifying residual stress through the [redacted] technique as “innovative and highly relevant to the aerospace industry because of the ease with which this can be applied to inspect components in a more practical way” and describes her contributions as “high-quality.” Finally, [redacted] mentions the Petitioner’s research in this area, stating that “her accomplishments are

exemplary and have resulted in the use of [redacted] in the residual stress measurements in government and industrial practice throughout the United States.”

While these three letters praise the Petitioner’s research and indicate that it was original, the record does not contain independent support for [redacted]’s statement that the [redacted] method is being widely used for residual stress measurements in government and industrial practice. Further, the Petitioner provided citation information indicating that her published research in this area, which appeared in the *Journal of Metals* in 2012, has been cited by other researchers, but did not provide comparative evidence indicating that it has been widely cited or significantly influenced other researchers in the field.

The record reflects that the Petitioner also worked with [redacted] as a pre-doctoral and post-doctoral associate at [redacted], specifically “on the development of alternative magnet technologies which could operate in place of rare earth-based permanent magnet materials. He explains that the permanent magnet-based motor technologies are evolving as a major market due to the adoption of electrical vehicles, but notes that alternatives to permanent rare-earth magnets are needed due to China’s domination of the rare earth magnetic materials market and the resulting high price of these materials. [redacted] states that, while in his lab, the Petitioner developed a new process used to improve the magnetic properties of [redacted] which continues to be used in his lab and “has been used by numerous other researchers.” However, the record does not contain any additional information regarding how or to what extent other researchers have relied on the Petitioner’s findings in support of a claim that she made a contribution of major significance.

The remaining scientific contributions highlighted in the record relate to the Petitioner’s work with the [redacted], [redacted] former president and CEO of the group, notes that the Petitioner worked on the development of lean rare earth magnetic powder during her tenure in Sweden. He explains that she “was instrumental in developing a new [redacted] [redacted] using atomization process” which was “different from our traditionally focused iron based alloys.” [redacted] further states that “her work is being continued by other researchers and thereby using her process development at our organization.” Like [redacted] he also notes the potential impact of this research on the electric vehicle market. However, he does not state how the Petitioner’s work with the [redacted] alloy has impacted the field beyond furthering research in this area in [redacted] [redacted] own development centers. [redacted] chief metallurgist at [redacted] also discusses the Petitioner’s work in this area, noting that “this product development represent[s] a significant advancement in the production readiness of non-rare earth magnets.” He also addresses the Petitioner’s work on a project to expand the company’s [redacted] powder to a variety of foods, noting that she worked on the development of a production-scale coating process that results in edible and biodegradable white powder which he describes as representing “a major breakthrough in world health.” [redacted] does not further explain how the Petitioner’s discoveries have impacted her field through specific examples.

The Petitioner also submits a letter from [redacted], an associate professor at [redacted] in Sweden, who states that his laboratory worked with [redacted] on the [redacted] project. He refers to the Petitioner’s contribution in this area as “significant,” noting that her ability to enhance the [redacted] was “useful not only for her company but also the entire scientific community.” [redacted] explains that her findings are relevant to the automotive industry due to its

current reliance on rare earth materials in magnets needed for the production of electric vehicles. Further, he states “this invention of rare earth-free magnets is a revolution in the materials science field.” Finally, he notes that the Petitioner’s discoveries in this area have been used in his lab for the development of alloys, and he describes her contributions as “exemplary and of a groundbreaking nature.”

Finally, [redacted] indicates that he is aware of the Petitioner’s continued work with non-rare earth magnetic materials at [redacted] and states that “her current research and development of such advanced engineering materials has not only benefited her company, other U.S. industries and government entities, but also opened up avenues of innovation in materials research in a broader way.” He states that her work is “invaluable for not only the commercial sector but also for the government.”

The letters considered above primarily contain attestations of the novelty and utility of the Petitioner’s research studies without providing specific examples of contributions that rise to a level consistent with major significance. Letters that specifically articulate how a petitioner’s contributions are of major significance to the field and its impact on subsequent work add value.⁴ Letters that lack specifics and use hyperbolic language do not add value, and are not considered to be probative evidence that may form the basis for meeting this criterion.⁵ USCIS need not accept primarily conclusory statements. *1756, Inc. v. The U.S. Att’y Gen.*, 745 F. Supp. 9, 15 (D.C. Dist. 1990).

As noted, some of the letters go beyond explaining the originality of the Petitioner’s research, and indicate that her discoveries already have commercial, industrial, government, and military applications. In addition, we acknowledge [redacted]’s assertion that her work with rare-earth free magnets represents “a revolution in the materials science field” and is “groundbreaking.” However, the Petitioner seeks to meet this criterion based solely on letters from persons with whom she has directly worked. If she has in fact made revolutionary contributions to the field and achieved a “major breakthrough in world health,” and if her discoveries have already been widely implemented, then it is reasonable to look to evidence derived from outside the circle of researchers with whom she has personally worked. In a request for evidence, the Director provided a list of suggested objective evidence the Petitioner could provide in support of this criterion, such as additional support letters from experts, evidence that her work has been widely cited and discussed in the field, or evidence that it has been implemented by others. The Director specifically advised the Petitioner that “general statements regarding the importance of the endeavors which are not supported by documentary evidence are not sufficient.”

On appeal, the Petitioner asserts that Director did not give adequate weight to the supporting letters submitted in support of the criterion and contends that they are “substantially corroborated by her publication record and professional appointments.” While the Petitioner’s citation history confirms that she published the results of the research she performed at [redacted] and [redacted] School of Mines, it does not corroborate her claim that she has made a contribution of major significance. The Petitioner submitted evidence of the number of times each of her articles has been published, but did not provide comparative data for citations in her field. Citation rates provide evidence of discussion

⁴ See USCIS Policy Memorandum PM 602-0005.1, *supra*, at 8-9.

⁵ *Id.* at 9. See also *Kazarian*, 580 F.3d at 1036, *aff’d* in part 596 F.3d at 1115 (holding that letters that repeat the regulatory language but do not explain how an individual’s contributions have already influenced the field are insufficient to establish original contributions of major significance in the field).

of the Petitioner's work in the field, but do not, by themselves, provide sufficient context to determine the nature of that discussion or the impact of her work on the field.

As noted, the Petitioner also claims that her "professional appointments" corroborate that she has made original contributions of major significance in her field. In this regard, the Petitioner states that she demonstrated that she has held a critical role with [redacted] which "is a major participant in the global powdered market." As such, she states that "any contributions critical to [redacted] are necessarily of major significance to the industry." The Petitioner has not, however, demonstrated how her contributions have been implemented by her employer or its clients. Simply stating that her research will eventually impact her company and the market is not sufficient to establish that she has already made an original contribution of major significance in the field.

Finally, the Petitioner states on appeal that the letters from her colleagues "describe the present commercial and governmental impacts of her work as well as the impact on their own and other researchers' continuing work." As discussed, while we find that the submitted letters from colleagues are effective in describing the Petitioner's original contributions, we disagree with the Petitioner's claim that they "describe" the present impact of those contributions. The letters that do make such a claim do so in general terms, do not provide specific details, and are not accompanied by independent evidence of that impact.

Considered together, the evidence consisting of the citations to the Petitioner's published findings, and the reference letters from her fellow materials engineers and researchers establishes that the Petitioner has been a productive researcher in both academia and in private industry, and that her published data and findings have been relied upon by others in their own research. It does not demonstrate that the Petitioner has made a contribution of major significance in the field of materials engineering. The phrase "major significance" is not superfluous and thus has meaning. See *Silverman v. Eastrich Multiple Investor Fund, L.P.*, 51 F.3d 28, 31 (3d Cir. 1995), quoted in *APWU v. Potter*, 343 F.3d 619, 626 (2d Cir. 2003). "Contributions of major significance" connotes that the petitioner's work has significantly impacted the field. See *Visinscaia*, 4 F. Supp. 3d at 134.

For the reasons discussed, the Petitioner has not met this criterion.

Evidence of the individual's authorship of scholarly articles in the field, in professional or major trade publications or other major media. 8 C.F.R. § 204.5(h)(3)(vi)

The Petitioner provided copies of her published papers and her Google Scholar citation history in support of the petition. This evidence establishes that she published articles in journals and conferences including the *Journal of Materials Science*, *Journal of Nanoscience and Nanotechnology*, and the *Journal of Metals*. Accordingly, we agree with the Director's determination that she meets this criterion.

Evidence that the individual has performed in a leading or critical role for organizations or establishments that have a distinguished reputation. 8 C.F.R. § 204.5(h)(3)(viii)

The Petitioner claims that she performed in a “leading and/or critical” role for her former employer, [redacted] and its U.S. subsidiary, relying on the above-referenced letters from [redacted] and [redacted]. The Director found that the Petitioner provided evidence that the [redacted] group has a distinguished reputation, but determined that her leading or critical role with the organization was not adequately documented.

To satisfy this criterion, the evidence must establish that she is or was a leader within the organization.⁶ If she claims to have performed a critical role, then she must establish that the role is or was of significant importance to the outcome or standing of the organization or its activities. A supporting role may be considered “critical” if his performance in the role is or was important in that way. It is not the title of the Petitioner’s role, but rather her performance in the role that determines whether the role is or was critical.⁷

The record is insufficient to demonstrate that the Petitioner satisfies this criterion. While the letters from the Petitioner’s former colleagues show that she has played a key role for certain studies, she has not established that she has played a leading or critical role for [redacted] or its subsidiary to the extent that her work was of significant importance to the companies’ outcome or standing in the industry. With respect to the claim that she had a leading role, the record does not contain a full description of her job duties as a development engineer or innovation engineer, nor does it include evidence of her placement in the company’s hierarchy.

Former [redacted] CEO [redacted] states that she was an “invaluable member of the team” while working as a development engineer in the [redacted] Department in Sweden, that she was “instrumental in developing a [redacted]” and that her work is being continued by other researchers within the organization. He also discusses the Petitioner’s assignment with [redacted] noting that she has been working on the development of new materials for additive manufacturing. Specifically, he states that her “contribution for this development has been crucial to our company’s development in the field of additive manufacturing as it is a new venture for us.”

[redacted] who worked with the Petitioner in the United States, states that she “led [redacted] efforts in the [non-rare earth magnets] field, developing the [redacted] which is free of any rare earth materials.” He indicates that, in the United States, the Petitioner has worked “the development of new product [redacted] by electrolytic method where the major application is in producing power grid lines.” [redacted] states that her research in this area “not only opens the market for new product applications but also cost savings in terms of scrap reduction.” As noted, he also indicated that the Petitioner was involved in the development of the company’s [redacted] powder product. He described her contributions as “indispensable for the advancement of research on advanced materials” for [redacted].

While the Petitioner’s colleagues refer to her work as “invaluable,” “instrumental,” “crucial” and “indispensable,” the letters stop short of explaining how her role with the company has been of

⁶ See USCIS Policy Memorandum PM 602-0005.1, *supra*, at 10 (stating that “a title, with appropriate job duties, can help to establish if a role is (or was), in fact, leading.”)

⁷ *Id.*

significant importance to the outcome or standing of the organization or its activities, or that her work on the above-mentioned projects and product are critical to the company as a whole. Neither letter sufficiently explains the impact of her research and development work on the company's overall operations, finances or research. While that the Petitioner made contributions to her employer through several research projects, the submitted evidence does not establish the impact of her role on overall operations. Accordingly, the Petitioner has not met this criterion.

III. CONCLUSION

The Petitioner has not submitted the required initial evidence of either a one-time achievement or documents that meet at least three of the ten criteria. As a result, we need not provide the type of final merits determination referenced in *Kazarian*, 596 F.3d at 1119-20. Nevertheless, we advise that we have reviewed the record in the aggregate, concluding that it does not support a finding that the Petitioner has established the acclaim and recognition required for the classification sought.

The Petitioner seeks a highly restrictive visa classification, intended for individuals already at the top of their respective fields, rather than for individuals progressing toward the top. USCIS has long held that even athletes performing at the major league level do not automatically meet the "extraordinary ability" standard. *Matter of Price*, 20 I&N Dec. 953, 954 (Assoc. Comm'r 1994). Here, the Petitioner has not shown that the significance of her work is indicative of the required sustained national or international acclaim or that it is consistent with a "career of acclaimed work in the field" as contemplated by Congress. H.R. Rep. No. 101-723, 59 (Sept. 19, 1990); *see also* section 203(b)(1)(A) of the Act. Moreover, the record does not otherwise demonstrate that the Petitioner has garnered national or international acclaim in the field, and she is one of the small percentage who has risen to the very top of the field of endeavor. *See* section 203(b)(1)(A) of the Act and 8 C.F.R. § 204.5(h)(2).

For the reasons discussed above, the Petitioner has not demonstrated his eligibility as an individual of extraordinary ability. The appeal will be dismissed for the above stated reasons, with each considered as an independent and alternate basis for the decision.

ORDER: The appeal is dismissed.