U.S. Citizenship and Immigration Services

Non-Precedent Decision of the Administrative Appeals Office

In Re: 16151379

Date: JUN. 07, 2021

Appeal of Texas Service Center Decision

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

The Petitioner, a researcher focusing on environmental and chemical/petroleum engineering, seeks classification as an alien 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, concluding that the record did not establish that the Petitioner met the initial evidence requirements for the classification through receipt of a major, internationally recognized award or by meeting at least three of the evidentiary criteria at 8 C.F.R. § 204.5(h)(3). We initially summarily dismissed the Petitioner's appeal, but subsequently reopened it on service motion.

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 international 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 criteria 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) (discussing a two-part review where the documentation is first counted and then, if fulfilling the required number of criteria, considered in the context of a final merits determination); *see also Visinscaia v. Beers*, 4 F. Supp. 3d 126, 131-32 (D.D.C. 2013); *Rijal v. USCIS*, 772 F. Supp. 2d 1339 (W.D. Wash. 2011).

II. ANALYSIS

The Petitioner earned a Ph.D. in environmental engineering from [redacted] University in 2017, and at the time of filing was employed in the oil and gas industry as a research engineer focusing on flow assurance and water treatment. He indicates that he intends to continue pursuing research in these areas in the United States.

A. Evidentiary Criteria

Because the Petitioner has not indicated or established that he has received a major, internationally recognized award, he 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 his authorship of scholarly articles and service as a judge of the work of others in his field. On appeal, the Petitioner asserts that he also meets the evidentiary criterion relating to original contributions of major significance to the field, and that the Director mischaracterized or ignored much of the evidence submitted in support of that criterion. After reviewing all of the evidence in the record, we agree with the Director's conclusions regarding the two criteria he found the Petitioner to have met, as there is ample evidence in the record of the Petitioner's authorship of scholarly articles and service as a peer reviewer for scientific journals.

Regarding the third criteria claimed by the Petitioner, the Director's decision drew unsupported conclusions from the evidence of the Petitioner's contributions to his field and applied them inappropriately in the analysis. However, upon *de novo* review of the evidence, we conclude that the Petitioner has not established that he meets that criterion.

> *Evidence of the alien'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)

In order to satisfy this criterion, a petitioner must establish that not only has he or she made original contributions, but that they have been of major significance in the field. For example, a petitioner may show that the contributions have been widely implemented throughout the field, have remarkably impacted or influenced the field, or have otherwise risen to a level of major significance. *Visinscaia* at 134.

The evidence indicates that the Petitioner's contributions to his field fall into three main areas of research in the field of environmental and chemical/petroleum engineering. The first area concerns his development of an irrigation water management model while a student at [redacted] University. [redacted] of [redacted] University submitted a reference letter on the Petitioner's behalf, indicating that he served as his undergraduate research advisor.[1] He describes the Petitioner's work in detail, and states that the Petitioner applied the model he developed to an arid region in China and reported his results in a paper published in *Agricultural Water Management* in 2013. [redacted] notes that one of the papers which cite to this article tested the effectiveness of another irrigation model against the Petitioner's, showing that it served as a benchmark for future developments.

Another reference letter which describes this research was submitted by [redacted] of [redacted] University of Science and Technology. Although he does not indicate how he became familiar with the Petitioner's work, he refers to another group of researchers who also compared the Petitioner's irrigation model to their own, and indicates that the Petitioner's published research had been cited on 246 occasions at the time his letter was written. However, neither he nor [redacted] describe how the performance of the Petitioner's model compared to that of other researchers, or the extent to which it influenced the development of these subsequent models. In addition, [redacted] does not explain the relevance of the number of citations to the entirety of the Petitioner's published work as a measure of the contribution made by this specific research.

The Petitioner also submitted several articles which cite to his paper in *Agricultural Water Management*. Some of these articles consider this paper as one of several employing various methods to model the management of irrigation. For example, an article in published in *Journal of Hydrology* in 2019 lists the Petitioner's as one of several "mathematical programming approaches" applied to water resource management, and does not single it out as particularly impactful. Similarly, a 2017 paper in *Agricultural Water Management* cites the Petitioner's paper as an example of the use of [redacted] programming, before going on to apply a different model. Another paper published in the same journal and year lists the Petitioner's as one of four "catchment water allocation tools." And a paper published in *Energy Procedia* in 2019 cites the Petitioner's paper and another in explaining the terms of a mathematical formula. This evidence shows that the Petitioner's approach and methods have served as a basis for comparison for other researchers, but does not establish that it stood out from similar research in terms of its significance to the field or was ultimately adopted and implemented on a widespread basis.

A second focus of the Petitioner's research involved his contributions to a software product developed by the [redacted]) at [redacted] University and used by consortium members in the oil and gas industry. The Director of the [redacted] [redacted], wrote to confirm that the

[1] We have thoroughly reviewed all of the reference letters submitted by the Petitioner, including those not specifically mentioned in this decision.

Petitioner's work "improved upon the conventional [redacted] model," and was incorporated into the [redacted] software as "a set of compatible viral coefficients" which allowed it to be applicable to a wider range of [redacted] conditions. [redacted] goes on to state that [redacted] "is employed by over 40 major oil and gas exploration and production companies…" to "control and manage scale issues and save millions and millions of dollars every year." While this letter indicates that the Petitioner's work has been implemented in the oil and gas industry, [redacted] does not state whether its inclusion in [redacted] directly led to increased usage of this software, which had been previously developed by the [redacted] and was already in use by consortium members in the industry.

The Petitioner's work in this aspect of his career also led to publications in scientific journals and presentations at conferences. [redacted] of [redacted] University in the United Kingdom discusses the Petitioner's research in the [redacted] crystallization, and explains the limitations of previous models based upon [redacted] He states that he "referenced [the Petitioner's] assertion of the importance of selecting the most accurate equilibrium constants" in his own work, and notes that his research "helped us complete our study and advanced the theoretical understanding of [redacted] of the whole industry." Although this letter confirms that this work contributed to the field of environmental and chemical engineering, and particularly to the [redacted] niche within that field, it does not show that it stood out from advances made by others in the field as being of major significance.

Another researcher who cited to the Petitioner's research regarding [redacted] is [redacted] who writes that he works as a [redacted] engineer in the oil and gas industry. He indicates that the Petitioner "substantially improved the [redacted] model," and that he and his colleagues used the Petitioner's methods and expanded upon them "to look at ways of developing a more reliable tool for predicting [redacted]." Although he goes on to state that the Petitioner's "improved [redacted] model has become the new industry-wide standard, where it is known as the [redacted] this statement contradicts [redacted]'s letter which indicates that the Petitioner's work was incorporated into [redacted] which was already widely used in the industry. Further, while both of these letters confirm that other researchers have built upon the Petitioner's work, and provide details about how it has impacted their own research to some extent, they do not indicate that it has remarkably impacted the environmental and chemical engineering field.

The record also includes other evidence of citation to the Petitioner's work in [redacted] This includes partial copies of several articles which cite to the Petitioner's work. One such paper was presented at the 2019 [redacted] International Conference [redacted] Chemistry, and cites three papers co-authored by the Petitioner. The authors use the Petitioner and his colleagues at [redacted] University as examples of "several researchers" generating [redacted] and [redacted] conditions to develop improved [redacted] models, but they critique this work by noting that the full details of experimental methods are not disclosed. In addition, despite the Petitioner's papers comprising three of the six articles cited in this paper, the partial copy of this paper submitted does not demonstrate that the authors relied upon his work to support their own or reach conclusions.

Another example of an article in the record which cites the Petitioner's published research in this niche was published in the *Journal of Petroleum Science and Engineering* in 2019. Here the authors indicate that the Petitioner and his colleagues are among "many researchers [who] identify [redacted] as

being one of the main driving forces for [redacted]" and use data from one of their papers to perform a simulation.

These and the other papers submitted show that other researchers have referred to and built upon the Petitioner's published research in [redacted] prediction and prevention. While they offer deeper insight into the impact of the Petitioner's work beyond simple citation figures and statistics, these examples do not show that his work was unusually or remarkably influential on other researchers or otherwise rose to the level of major significance.

Regarding citation figures and statistics, on appeal the Petitioner asserts that the Director was not justified in considering figures from his Google Scholar profile as diminished in probability, and did not give consideration to statistics from Microsoft Academic and Clarivate Analytics. Although the Petitioner acknowledges that the article published in *Scientometrics* in 2014, which he submitted in response to the Director's RFE, states that citation figures from Google Scholar should not be used for bibliometric analysis due to "numerous deficiencies for research evaluation," he nevertheless defends his reliance on the analysis from Microsoft Academic which is based upon those figures. That report indicates that the Petitioner's "citation percentile" and "publication percentile" are both above 99%, but does not explain the methodology used to arrive at these figures or their meaning. We also note that the portion of the report labelled "areas of research" includes systems engineering and "natural resource economics," subjects which are not clearly related to the Petitioner's specific research, but does not include chemical engineering, petroleum engineering or [redacted] In addition, the Petitioner does not explain how this report, which considers citations to all of his work, is relevant to the consideration of specific research contributions he has made in niches such as irrigation water management and [redacted] prediction and prevention. For all of these reasons, we do not find the report from Microsoft Academic to be relevant to the issue of whether the Petitioner has made original contributions of major significance to his field, whether in this aspect of his work or in the others considered in this decision.

Turning to the evidence from Clarivate Analytics, the Petitioner submitted evidence showing percentile rankings for citations to papers published in several research fields in specific years as of 2019. He highlights the figures in the "Environment/Ecology" field, and the citation figures in the 10th percentile for the years 2013, 2015, and 2017. We note that the *Scientometrics* article indicates that the relative citation rates given by Thomson Reuters (now Clarivate Analytics) are based upon citation figures from its own database, the Web of Science. However, the record does not include complete citation figures for each of the Petitioner's published works from the Web of Science, only a summary of the total citations from 14 unidentified articles published by the Petitioner. Since the complete citation figures in the record from Google Scholar cannot be reliably compared to the relative citation rates in the record, this evidence does not show that the number of citations to the Petitioner's research are within any particular percentile within his field, or that they indicate that his published work remarkably impacted or influenced the field.

The Petitioner also submitted other evidence regarding this aspect of his research in response to the Director's RFE. This included emails from other researchers seeking assistance in applying the model developed in part by the Petitioner. For example, an email from researchers at the University of [redacted] to [redacted] states that his research "on [redacted] has been of great help to us," and includes an email from him to the Petitioner seeking assistance in answering the

researchers' questions about his model. Another email sent directly to the Petitioner from the representative of a company developing [redacted] seeks a meeting with him regarding "technology gaps" in this area. These emails show that the Petitioner is considered to be an expert in [redacted] prediction and prevention, and also confirm some interest in tools which he developed or improved upon from researchers in academia and industry. But these examples, when considered with the other evidence regarding the Petitioner's contributions relating to [redacted] prediction and prevention, are insufficient to establish that his contributions were of major significance to the field of environmental and chemical engineering.

The third aspect of the Petitioner's research which he asserts is an original contribution of major significance concerns two software modules he helped to develop to reduce the amount of freshwater needed to [redacted] in oil wells. The record includes a reference letter from [redacted], a principal investigator at [redacted] where the Petitioner completed a three-month graduate research internship. [redacted] explains that the Petitioner provided "invaluable contributions" to a project focused on "optimizing [redacted] control in the [redacted]." She explains that he developed one software module, the Monitor Module, and helped to develop a theoretical model called the [redacted] Module, both of which allow the company to determine the amount of freshwater necessary to prevent [redacted] [redacted] further states that the use of these models greatly reduced water usage and has saved [redacted] millions of dollars, and that the project was nominated for a company award and resulted in a conference paper.

While this letter demonstrates that [redacted] implemented the Petitioner's work for this project, the record does not include evidence showing that either the software modules generated interest beyond the company to the broader oil and gas industry, or otherwise constituted a contribution of major significance in the field of environmental and chemical engineering. We note that the reference letters from [redacted] and [redacted] of [redacted] also mention the Petitioner's work for [redacted] on this project, but neither of them indicate that they have first-hand knowledge of the project or the software modules developed. In addition, although [redacted] indicates that this paper was selected as a keynote talk for the conference, the record does not show that it has been frequently cited by other researchers in their own published work.

After review of the evidence and for the reasons discussed above, we conclude that the Petitioner has not established that he meets 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 his 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 that he 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.