U.S. Citizenship and Immigration Services

Non-Precedent Decision of the Administrative Appeals Office

In Re: 32081991

Date: APR. 16, 2024

Motion on Administrative Appeals Office Decision

Form I-140, Immigrant Petition for Alien Workers (National Interest Waiver)

The Petitioner, a mechanical and aerospace engineer, seeks employment-based second preference (EB-2) immigrant classification as a member of the professions holding an advanced degree or as an individual of exceptional ability in the arts, sciences or business. In addition, he seeks a national interest waiver of the job offer requirement attached to the EB-2 classification. *See* Immigration and Nationality Act (the Act) section 203(b)(2), 8 U.S.C. § 1153(b)(2).

The Director of the Nebraska Service Center denied the petition, concluding that the Petitioner qualified for classification as a member of the professions holding an advanced degree, but that he had not established that a waiver of the required job offer, and thus of the labor certification, would be in the national interest.[1] We dismissed his appeal, and initially dismissed the Petitioner's combined motions to reopen and reconsider, but subsequently reopened them on service motion. The matter is now before us on combined motions to reopen and reconsider.

The Petitioner bears the burden of proof to demonstrate eligibility by a preponderance of the evidence. *Matter of Chawathe*, 25 I&N Dec. 369, 375-76 (AAO 2010). Upon review, we will grant the motion and sustain the appeal.

I. LAW

The regulation at 8 C.F.R. § 103.5(a)(1)(i) limits U.S. Citizenship and Immigration Services' (USCIS) authority to reopen or reconsider to instances where a petitioner has shown "proper cause" for that action. Thus, to merit reopening or reconsideration, a petitioner must not only meet the formal filing requirements at 8 C.F.R. § 103.5(a)(1)(iii) (such as submission of a properly completed and signed Form I-290B, Notice of Appeal or Motion, with the correct fee), but also show proper cause for granting the motion. Specifically, a motion to reopen must state new facts and be supported by documentary evidence. 8 C.F.R. § 103.5(a)(2). A motion to reconsider must establish that our prior decision was based on an incorrect application of law or policy and that the decision was incorrect based on the evidence in the record of proceedings at the time of the decision. § 103.5(a)(3). Our

[1] Because the Director found the Petitioner eligible for classification as a member of the professions possessing an advanced degree, the decision did not evaluate the Petitioner's alternative claim that he also qualifies for EB-2 classification as an individual of exceptional ability.

review on motion is limited to reviewing our latest decision. 8 C.F.R. § 103.5(a)(1)(ii). We may grant motions that satisfy these requirements and demonstrate eligibility for the requested benefit.

II. BACKGROUND

Immediately prior to filing the instant petition, the Petitioner was employed as a senior engineer for [redacted] and in this role, he performed aerodynamics and computational fluid dynamics (CFD) engineering services as a contractor for [redacted] in [redacted] Florida. He indicates that he intends to continue his work in the field of mechanical and aerospace engineering in the United States with a specific focus in CFD, which he explains is a branch of fluid mechanics that uses numerical analysis and data structures to analyze and solve problems that involve fluid flows.

The record indicates that the Petitioner's proposed endeavor as a mechanical and aerospace engineer specializing in CFD is to conduct fundamental studies of flow physics for special applications; develop numerical tools and methods for addressing general and special challenges; conduct root cause analysis to identify and resolve aerothermal problems and fluid structure interactions; and design and analyze devices and components with CFD before and after experiments. He indicates that his work will provide greater information and further an understanding in the field of CFD by promoting multi-disciplinary interactions and applications of various methods and technologies based in CFD research. The Petitioner explained the manner in which his studies would examine the overlap of various technologies, noting the relationship between aircraft wings and turbine blades for power generation and the manner in which aircraft aerodynamics can lead to the production of aerodynamically fuel-efficient automobiles.

The record demonstrates that the Petitioner earned a Ph.D. and a master's degree in aerospace engineering from the [redacted] in 2015 and 2011, respectively. The record also indicates that the Petitioner attained two foreign specialized engineering degrees, involving energetics and combustion, prior to completing his graduate work in the United States. Therefore, our appellate decision determined that the record demonstrates that the Petitioner qualifies as a member of the professions holding an advanced degree. In dismissing the combined motions, we affirmed our appellate determination that the Petitioner met the first prong of the analytical framework described in the precedent decision *Matter of Dhanasar*, 26 I&N Dec. 884 (AAO 2016), but had not sufficiently established that he is well-positioned to advance the proposed endeavor under the second prong.

Dhanasar provides that after a petitioner has established eligibility for EB-2 classification, USCIS may, as matter of discretion,[2] grant a national interest waiver if the petitioner shows: (1) the proposed endeavor has both substantial merit and national importance; (2) the individual is well-positioned to advance their proposed endeavor; and (3) on balance, waiving the job offer requirement would benefit the United States.[3] Because our motion decision concluded that the Petitioner did not meet the second

[2] *See also Flores v. Garland*, 72 F.4th 85, 88 (5th Cir. 2023) (joining the Ninth, Eleventh, and D.C. Circuit Courts (and Third in an unpublished decision) in concluding that USCIS' decision to grant or deny a national interest waiver is discretionary in nature).

[3] *See Dhanasar*, 26 I&N Dec. at 888-91, for elaboration on these three prongs.

prong, we did not analyze prong three, the remaining eligibility ground, under the *Dhanasar* analytical framework.[4]

While the motion was pending, USCIS updated the USCIS Policy Manual's guidance to provide additional guidance regarding specific evidentiary considerations relating to persons with advanced degrees in science, technology, engineering, or mathematics (STEM). 6 *USCIS Policy Manual* F.5(D)(2), https://www.uscis.gov/policy-manual/volume-6-part-f-chapter-5. *See also* USCIS Policy Alert, PA-2022-02, National Interest Waivers for Advanced Degree Professionals or Persons of Exceptional Ability (Jan. 21, 2022), https://www.uscis.gov/sites/default/files/document/policy-manual-updates/20220121-NationalInterestWaivers.pdf.

As the Petitioner in this case possesses an advanced degree in a STEM field tied to the proposed endeavor he is impacted by the above policy manual updates, but our motion decision did not address them. As such, in February 2024 we reopened the Petitioner's motion *sua sponte*, pursuant to 8 C.F.R. § 103.5(a)(5)(ii), to consider anew the merits of the claims contained in his motion brief. The Petitioner was permitted a period of 30 days in which to provide a supplemental brief. In the Petitioner's supplemental brief, he asserts that our motion decision was based on an incorrect application of USCIS policy and argues the record establishes the Petitioner has met the remaining two prongs set forth in the *Dhanasar* analytical framework.

III. ANALYSIS

As stated, the issue before us is whether the Petitioner has submitted new facts supported by documentary evidence sufficient to warrant reopening his appeal and/or established that our decision to dismiss the appeal was based on an incorrect application of law or USCIS policy. The Petitioner must specify the factual and legal issues raised on appeal that were decided in error or overlooked in our initial decision.

A. Motion to Reconsider

1. Well-positioned to Advance the Proposed Endeavor

The second prong shifts the focus from the proposed endeavor to the individual. To determine whether an individual is well-positioned to advance the proposed endeavor, we consider factors including, but not limited to education, skills, knowledge, and record of success in related or similar efforts; a model or plan for future activities; any progress towards achieving the proposed endeavor; and the interest of potential customers, users, investors, or other relevant entities or individuals. *Dhanasar*, 26 I&N Dec. at 890. Our appellate decision reviewed documentation of the Petitioner's curriculum vitae, academic records (including his Ph.D. in Aerospace Engineering), articles that cited to his research findings, peer review activity, and offers of employment.[5] We also noted that the

[4] *See INS v. Bagamasbad*, 429 U.S. 24, 25 (1976) ("courts and agencies are not required to make findings on issues the decision of which is unnecessary to the results they reach"); *see also Matter of L-A-C-*, 26 I&N Dec. 516, 526 n.7 (BIA 2015) (declining to reach alternative issues on appeal where an applicant is otherwise ineligible).

[5] Pursuant to the updated guidance mentioned above, "USCIS considers an advanced degree, particularly a Doctor of Philosophy (Ph.D.), in a STEM field tied to the proposed endeavor and related to work furthering a critical and emerging

Petitioner offered reference letters describing his expertise in CFD analysis and mechanical and aerospace engineering, and his past record of success in those research areas. In our appellate decision, we determined that though the record demonstrates the Petitioner conducted, published, and presented research during his graduate studies and in his professional career, he has not shown that this work renders him well-positioned to advance his proposed CFD research.

On motion and in his supplemental brief, the Petitioner asserts that we failed to carefully analyze strong examples of his record of success in the field, including letters detailing how his work developing advanced gas turbine diffusers and his employment of novel techniques in CFD to model the fluid dynamics of hot gas exhaust flow path have influenced the field of mechanical and aerospace engineering. After further review, when considered collectively, the expert testimonial letters and other documentation submitted establish sufficiently that the Petitioner's past experience renders him well-positioned to advance his proposed endeavor.

For example, [redacted] Director of Engineering at [redacted] an aerospace components company, provides that the Petitioner used CFD to solve a safety problem with a cone-shaped probe used by its customers in [redacted] military aircraft. He explains that a "pressure droop" caused faulty in-flight readings that increased the risk of stall and mid-air collision. After aerodynamicists of the planes' respective manufacturers at [redacted] were unable to solve the problem, it was referred to the Petitioner at [redacted] aerospace engineering department for CFD analysis.

[redacted] relates that the Petitioner determined that the air flowing over the probe was reaching supersonic speeds and developing a shock wave, causing the error in static pressure measurement and leading to inaccuracies in altitude and airspeed calculations. The Petitioner recommended small protrusions in the surface of the cone to effectively "trip" the boundary layer and detach the shockwave; when customers implemented the "trip dots" the problem was solved. [redacted] states that [redacted] incorporated the Petitioner's solution into all new cone-shaped probe designs to eliminate the pressure droop issue and prevent aircraft mishaps. Therefore, the Petitioner demonstrated that his novel solutions in CFD modeling were essential to redesign [redacted] probe design and were implemented and utilized by its military aircraft clients.

With respect to the Petitioner's work developing solutions and techniques in CFD modeling for the design and development of highly sophisticated gas turbines as a contractor for [redacted] the record contains two letters from [redacted] the principal engineer and project lead in the gas turbine technology department at [redacted] who served as the Petitioner's technical supervisor between 2013 and 2019. He indicates that the Petitioner's research in the field of turbomachinery aerodynamics and CFD has been "instrumental to the development of improved gas turbine exhaust diffusers and turbine blade tip aerodynamics which continues to result in innovations and improvement in gas turbine efficiency."

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technology or other STEM area important to U.S. competitiveness or national security, an especially positive factor to be considered along with other evidence for purposes of the assessment under the second prong." *See* 6 *USCIS Policy Manual*, *supra*, at F.5(D)(2).

[redacted] provides that between 2015 and 2019 the Petitioner led experimental testing and computational analysis at the [redacted] exhaust diffuser test rig, where he applied novel numerical techniques to model the performances of current and advanced aerodynamic exhaust diffuser technologies. He also developed novel techniques in CFD to model the fluid dynamics of hot gas exhaust flow path.[6] He further focused on optimizing the performance of exhaust diffusers under various load conditions. [redacted] asserts that the Petitioner's research was essential to improve existing and newly designed gas turbine exhaust diffusers and allowed [redacted] energy to deliver novel gas turbine exhaust diffusers, notably the HL-class gas turbines. Specifically, the Petitioner was instrumental in achieving a smaller footprint while delivering 25% higher power output compared to the previous H-class engines, providing utility company clients more stable and efficient power around the world.

In addition, the Petitioner submitted a letter dated 2018 from [redacted] head of the thermal turbomachinery group at the [redacted] which collaborates with [redacted] in the field of axial gas turbine diffuser flows. [redacted] relates he had worked with the Petitioner since 2015 and confirms the Petitioner's responsibility for fluid dynamic simulations for the [redacted] test rig and real gas turbine energy diffusers, and his involvement in the design and development of highly sophisticated gas turbines for efficient and reliable power generation. [redacted] explains that, as gas turbines are also applicable for solar thermal power plants, the Petitioner's skill and expertise in gas turbine development efforts has applications in a variety of fields, such as the development of a fossil-free electric power supply," meaning that "[the Petitioner] is effectively working in one of the most important areas for today's society and future generations."

On motion, the Petitioner argues that he provided additional evidence that demonstrates the direct practical use of his work, as published materials show that newly designed [redacted] gas turbine diffusers, in which he was instrumentally involved, were being implemented and utilized by utility companies and applauded in the field of turbomachinery aerodynamics. Screenshots of articles posted on the websites www.powermag.com and www.dieselgasturbine.com indicate world-wide commercialization of the HL-class engines, including in gas power plants in the United States, United Kingdom, and a combined cycle (gas/steam) power plant in South Korea. They indicated that the "higher efficiency" HL-class was designed to "save fuel and also reduce emissions of carbon dioxide by as much as 3.7 million metric tons per year, compared to coal-fired power plants" making such turbines "the best match to backup and balance renewables."

Further, on motion, the Petitioner provides a letter from Professor [redacted] principal investigator of the CFD laboratory of the department of mechanical engineering at the [redacted] Japan, who praises the Petitioner's doctoral work in wind energy engineering, specifically, his novel use of multi-element airfoils to improve vertical axis wind turbine performance. He acknowledges benefiting from the Petitioner's work, having highlighted his research in four of his own published articles. In our appellate decision, we found that the number of citations

[6] [redacted] indicates that the results of the Petitioner's research for [redacted] have proprietary limitations preventing their publication; he states that the "[m]ajor findings of [the Petitioner's] research are included in [redacted] exhaust diffuser design and development guidelines" which "are confidential documents and cannot be disclosed."

received by the Petitioner's five published articles did not reflect a level of interest in his work sufficient to meet *Dhanasar's* second prong.

While a strong citation history can be useful in establishing the influence or significance of an individual's work within the broader field, upon review we agree with the Petitioner's argument on motion that the evidence in the aggregate supports his assertion that his past work has found practical application in industry settings, rendering him well-positioned to advance the proposed endeavor. The above documentation, as well as other materials not discussed in this decision, provided specific examples indicating that the Petitioner's novel solutions and techniques in CFD modeling for turbomachinery and optimization have greatly contributed to gas turbine technology development, served as an impetus for progress in his field, and been implemented and utilized by utility companies. The record, therefore, demonstrates sufficiently that the Petitioner's novel techniques in CFD represent a record of success and progress rendering him well-positioned to advance his proposed endeavor.

Moreover, the Petitioner provided correspondence from potential employers in the field that refer to his personal research or accomplishments in the area of CFD as they pertain to the aerospace industry.[7] For example, a letter from [redacted] an engineering project manager at [redacted] indicates an interest in employing the Petitioner, based on his "[c]ontribution to aviation safety" through work on the [redacted] probe, and his "conception and thorough investigation of [an] advanced model for wind power extraction using aeronautical techniques." Regarding the latter issue, he cites to two of the Petitioner's publications (2013 [redacted] and 2017 [redacted] as examples of the Petitioner's novel approach, adapting methods and techniques commonly used in the aerospace sector to enhance the field of wind energy engineering, by adapting the multi-element airfoils standard for aircraft wings for the enhancement of wind power extraction.

In addition, [redacted] an assistant professor of mechanical and aerospace engineering at the [redacted] indicated he assessed the Petitioner's work in considering the Petitioner for a research engineer position involving the optimization of the [redacted] in collaboration with [redacted] He asserts that the Petitioner "has exhibited a truly rare ability to support and develop new investigations into the details of flow physics through CFD" and "has positioned himself at the forefront of the fields of wind engineering, aerospace sciences, and CFD engineering." Further, [redacted] a research aerospace engineer with the [redacted] indicated that '[redacted] expresses great interest in the endeavor as proposed by the [Petitioner]," noting that [redacted] utilizes CFD for advances in aeronautics for both civilian and military applications.

Finally, in his supplemental brief, as further corroborating documentation regarding the significance of his work, the Petitioner cites to the 2024 U.S. National Science and Technology Council's updated list

[7] As the Petitioner is applying for a waiver of the job offer requirement, it is not necessary for him to have a job offer from a specific employer. However, we will consider information about his position at [redacted] and his desired positions at [redacted] and [redacted] to illustrate the capacity in which he intends to work in order to determine whether his proposed endeavor meets the requirements of the *Dhanasar* framework.

of critical and emerging technologies and notes the Petitioner's involvement in projects related to listed critical and emerging technology areas such as [redacted] His experience and expertise in his STEM fields of mechanical and aerospace engineering and CFD and their applications in areas such as turbomachinery, aviation safety, and renewable energy, as well as his progress in his field and published articles, position him well to advance his proposed endeavor. Accordingly, upon review, we agree with the Petitioner that he has demonstrated that he satisfies the second prong of the *Dhanasar* framework.

2. Balancing Factors to Determine Waiver's Benefit to the United States

As explained above, the third prong requires the petitioner to demonstrate that, on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. In performing this analysis, we may evaluate factors such as: whether, in light of the nature of the individual's qualifications or the proposed endeavor, it would be impractical either for them to secure a job offer or to obtain a labor certification; whether, even assuming that other qualified U.S. workers are available, the United States would still benefit from their contributions; and whether the national interest in their contributions is sufficiently urgent to warrant forgoing the labor certification process.

In each case, the factor(s) considered must, taken together, establish that on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. *Dhanasar*, 26 I&N Dec. at 890-91. In addition, USCIS considers the following combination of facts contained in the record to be a strong positive factor: possession of an advanced STEM degree, particularly a Ph.D.; engagement in work furthering a critical and emerging technology or other STEM area important to U.S. competitiveness; and that the individual is well-positioned to advance the proposed STEM endeavor of national importance.

The evidence demonstrates that as a mechanical and aerospace engineer with a Ph.D., the Petitioner possesses considerable experience and expertise in his STEM research fields, and that he would be engaged in work furthering a critical or emerging technology. The Petitioner has documented his past successes in industry settings in using CFD to analyze and solve problems relating to aerodynamics and turbomachinery. The record also demonstrates the widespread scientific benefits associated with research progress in advanced gas turbine engine technologies. Based on the Petitioner's track record of successful research work and the significance of his proposed work to advance U.S. scientific interests furthering a critical and emerging technology, we find that he offers contributions of such value that, on balance, they would benefit the United States even assuming that other qualified U.S. workers are available. The Petitioner, therefore, meets the third prong of the *Dhanasar* framework.

Upon review, the record establishes the Petitioner has met the requisite three prongs set forth in the *Dhanasar* analytical framework. We conclude that he has established he is eligible for and otherwise merits a national interest waiver as a matter of discretion.

IV. CONCLUSION

The Petitioner has established that his motion meets the requirements of a motion to reconsider under 8 C.F.R. § 103.5(a)(3). Therefore, we will grant his motion to reconsider.

Because the Petitioner has established eligibility on motion to reconsider, we need not address the arguments presented on motion to reopen. The motion to reopen is moot.

ORDER: The motion to reconsider is granted and the appeal sustained.