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U.S. Department of Homeland Security  
U.S. Citizenship and Immigration Services  
Office of Administrative Appeals MS 2090  
Washington, DC 20529-2090



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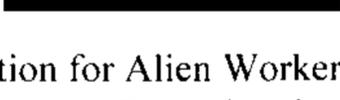
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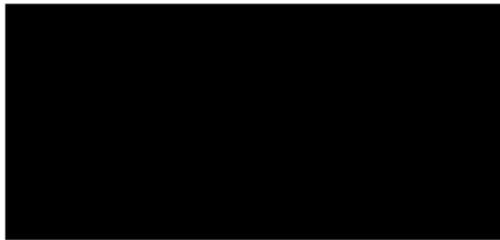
FILE:  Office: TEXAS SERVICE CENTER Date:

NOV 29 2010

IN RE: Petitioner:   
Beneficiary: 

PETITION: Immigrant Petition for Alien Worker as a Member of the Professions Holding an Advanced Degree or an Alien of Exceptional Ability Pursuant to Section 203(b)(2) of the Immigration and Nationality Act, 8 U.S.C. § 1153(b)(2)

ON BEHALF OF PETITIONER:



INSTRUCTIONS:

Enclosed please find the decision of the Administrative Appeals Office in your case. All of the documents related to this matter have been returned to the office that originally decided your case. Please be advised that any further inquiry that you might have concerning your case must be made to that office.

If you believe the law was inappropriately applied by us in reaching our decision, or you have additional information that you wish to have considered, you may file a motion to reconsider or a motion to reopen. The specific requirements for filing such a request can be found at 8 C.F.R. § 103.5. All motions must be submitted to the office that originally decided your case by filing a Form I-290B, Notice of Appeal or Motion. The fee for a Form I-290B is currently \$585, but will increase to \$630 on November 23, 2010. Any appeal or motion filed on or after November 23, 2010 must be filed with the \$630 fee. Please be aware that 8 C.F.R. § 103.5(a)(1)(i) requires that any motion must be filed within 30 days of the decision that the motion seeks to reconsider or reopen.

Thank you,

5 Perry Rhew  
Chief, Administrative Appeals Office

**DISCUSSION:** The Director, Texas Service Center, denied the employment-based immigrant visa petition, which is now before the Administrative Appeals Office (AAO) on appeal. The appeal will be dismissed.

The petitioner seeks classification pursuant to section 203(b)(2) of the Immigration and Nationality Act (the Act), 8 U.S.C. § 1153(b)(2), as an alien of exceptional ability or a member of the professions holding an advanced degree. The petitioner, a mechanical engineer, seeks employment as a physical scientist. The petitioner asserts that an exemption from the requirement of a job offer, and thus of an alien employment certification, is in the national interest of the United States. The director found that the petitioner qualifies for classification as a member of the professions holding an advanced degree, but that the petitioner had not established that an exemption from the requirement of a job offer would be in the national interest of the United States.

On appeal, counsel submits a brief and additional evidence. While some of counsel's assertions have merit, we uphold the director's ultimate conclusion that the petitioner has not demonstrated his eligibility for the classification sought. The petitioner's modeling of heat transfer in gas turbines is notable, particularly his pre-doctoral work in [REDACTED]. The petitioner's doctoral work in this area, however, has been less influential. Moreover, the petitioner's current work modeling aerosol deposits in the human lung, unpublished as of the date of filing, is too recent for us to evaluate its potential.

Section 203(b) of the Act states in pertinent part that:

(2) Aliens who are members of the professions holding advanced degrees or aliens of exceptional ability. --

(A) In general. -- Visas shall be made available . . . to qualified immigrants who are members of the professions holding advanced degrees or their equivalent or who because of their exceptional ability in the sciences, arts, or business, will substantially benefit prospectively the national economy, cultural or educational interests, or welfare of the United States, and whose services in the sciences, arts, professions, or business are sought by an employer in the United States.

(B) Waiver of job offer.

(i) . . . the Attorney General may, when the Attorney General deems it to be in the national interest, waive the requirements of subparagraph (A) that an alien's services in the sciences, arts, professions, or business be sought by an employer in the United States.

The petitioner holds a Ph.D. in Engineering from [REDACTED]. The petitioner's occupation falls within the pertinent regulatory definition of a profession. The petitioner thus qualifies as a member of the professions holding an advanced degree. The remaining issue is whether the petitioner

has established that a waiver of the job offer requirement, and thus an alien employment certification, is in the national interest.

Neither the statute nor pertinent regulations define the term “national interest.” Additionally, Congress did not provide a specific definition of the phrase, “in the national interest.” The Committee on the Judiciary merely noted in its report to the Senate that the committee had “focused on national interest by increasing the number and proportion of visas for immigrants who would benefit the United States economically and otherwise. . . .” S. Rep. No. 55, 101st Cong., 1st Sess., 11 (1989).

A supplementary notice regarding the regulations implementing the Immigration Act of 1990 (IMMACT), published at 56 Fed. Reg. 60897, 60900 (Nov. 29, 1991), states, in pertinent part:

The Service believes it appropriate to leave the application of this test as flexible as possible, although clearly an alien seeking to meet the [national interest] standard must make a showing significantly above that necessary to prove the “prospective national benefit” [required of aliens seeking to qualify as “exceptional.”] The burden will rest with the alien to establish that exemption from, or waiver of, the job offer will be in the national interest. Each case is to be judged on its own merits.

*Matter of New York State Dep't. of Transp.*, 22 I&N Dec. 215, 217-18 (Comm'r. 1998) (hereinafter “NYSDOT”), has set forth several factors which must be considered when evaluating a request for a national interest waiver. First, the petitioner must show that the alien seeks employment in an area of substantial intrinsic merit. *Id.* at 217. Next, the petitioner must show that the proposed benefit will be national in scope. *Id.* Finally, the petitioner seeking the waiver must establish that the alien will serve the national interest to a substantially greater degree than would an available U.S. worker having the same minimum qualifications. *Id.* at 217-18.

It must be noted that, while the national interest waiver hinges on *prospective* national benefit, the petitioner must establish that the alien’s past record justifies projections of future benefit to the national interest. *Id.* at 219. The petitioner’s subjective assurance that the alien will, in the future, serve the national interest cannot suffice to establish prospective national benefit. The inclusion of the term “prospective” is used here to require future contributions by the alien, rather than to facilitate the entry of an alien with no demonstrable prior achievements, and whose benefit to the national interest would thus be entirely speculative. *Id.*

We concur with the director that the petitioner works in an area of intrinsic merit, Computational Fluid Dynamics (CFD) modeling, and that the proposed benefits of his work, improved understanding of deposition of cigarette aerosols in lungs, would be national in scope. It remains, then, to determine whether the petitioner will benefit the national interest to a greater extent than an available U.S. worker with the same minimum qualifications.

Eligibility for the waiver must rest with the alien's own qualifications rather than with the position sought. In other words, we generally do not accept the argument that a given project is so important that any alien qualified to work on this project must also qualify for a national interest waiver. *NYSDOT*, 22 I&N Dec. at 218. Moreover, it cannot suffice to state that the alien possesses useful skills, or a "unique background." Special or unusual knowledge or training does not inherently meet the national interest threshold. The issue of whether similarly-trained workers are available in the United States is an issue under the jurisdiction of the Department of Labor. *Id.* at 221.

At issue is whether this petitioner's contributions in the field are of such unusual significance that the petitioner merits the special benefit of a national interest waiver, over and above the visa classification he seeks. By seeking an extra benefit, the petitioner assumes an extra burden of proof. A petitioner must demonstrate a past history of achievement with some degree of influence on the field as a whole. *Id.* at 219, n. 6. In evaluating the petitioner's achievements, we note that original innovation, such as demonstrated by a patent, is insufficient by itself. Whether the specific innovation serves the national interest must be decided on a case-by-case basis. *Id.* at 221, n. 7.

Initially the petitioner submitted his 10 published articles. While these articles deal with CFD modeling, they address heat exchange rather than aerosol deposits in the lungs. According to the petitioner's curriculum vitae, all of his articles on aerosol deposits were either in preparation or draft form as of the date of filing. The petitioner does list a conference presentation on aerosol deposits on his curriculum vitae. One of the petitioner's references, [REDACTED], Chief of the Division of Surgical Research at [REDACTED], affirms having met the petitioner at this conference.

While publication demonstrates the exposure of the petitioner's work in the field, it cannot demonstrate the subsequent influence of that work. Initially, the petitioner submitted evidence that two of his articles had garnered five citations each and another of his articles had garnered three citations. None of the petitioner's articles garnered more than two independent citations.

Counsel relies on the impact factor of the journals and the citations garnered by the petitioner's Ph.D. advisor, [REDACTED], as evidence that the above number of citations is significant in the petitioner's area of research. On appeal, [REDACTED], a professor at [REDACTED], asserts that even articles by leading researchers in CFD modeling do not generate significant numbers of citations.

The journal impact factor represents an average of citations to all of the articles in a given journal annually. It does not provide a useful gauge for determining the level of citations indicative of an influential article. Regarding [REDACTED] citations, while counsel relies on the average number of citations per article, we find it more useful to look at the level of citations garnered by his most

influential articles.<sup>1</sup> [REDACTED] has authored at least 21 articles that have garnered between 20 and 50 citations, one of which the *Journal of Heat Transfer* published in 2003, just a year before two of the petitioner's cited articles appeared in print. This information does not support [REDACTED] assertion that influential CFD modeling articles do not generate significant citation.

The petitioner also provided some of the citing articles. The citations themselves are not notable. Primarily the authors cite the petitioner's work as an example of work in the field and do not appear to be applying the petitioner's model in their own work.

While a small number of citations does not preclude a finding that the petitioner has a track record of success with some degree of influence in the field, the petitioner must submit other evidence that is indicative of his influence.

The petitioner has submitted evidence that he has reviewed manuscripts for the *Journal of Thermophysics and Heat Transfer*. On appeal, [REDACTED] asserts that the journal "selects only professionals with outstanding qualifications" to review manuscripts. We cannot ignore that scientific journals are peer reviewed and rely on many scientists to review submitted manuscripts. Moreover, the petitioner's work for this journal does not reflect on his influence on aerosol modeling in the human lung.

Professor [REDACTED] of [REDACTED] asserts that he has been familiar with the petitioner's name since 1996. [REDACTED] asserts that the petitioner "developed a body-fitted coordinate CFD code to simulate the conjugate heat transfer in the complex geometry channels" as a team member for the [REDACTED] Spacecraft Project 921. Professor [REDACTED] explains that the petitioner was not allowed to publish these results but affirms that the project members applied the petitioner's research in the development of [REDACTED] spacecrafts.

Professor [REDACTED] further asserts that the petitioner subsequently worked as a research engineer at the Institute of Engineering Thermophysics. According to Professor [REDACTED], the petitioner "developed a software package and conducted quantity analysis for power plant system[s]." Professor [REDACTED] continues:

Applying the Equivalent Enthalpy Drop (EED) theory, [the petitioner] built and programmed the mathematical model and finished several evaluations of [the] power plant. He also conducted the thermodynamic simulation and parameter optimization of modern power system by creatively using the first and second thermodynamics laws. He performed an advanced optimization method the economic index in power plants and found the best parameters for power plant operation. [The petitioner's] research

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<sup>1</sup> The only useful comparison of Dr. Han's average citation rate would be to the petitioner's average citation rate, which would need to take into account the seven articles he has authored that have not been cited at all.

results on this project were presented in several domestic conferences and highly regarded by [the] Chinese energy community and industry.

██████████ Vice President of the ██████████ asserts that in 2001, the institute developed computer software to evaluate energy system economics in power plants, incorporating an energy method presented in one of the petitioner's articles. ██████████ asserts that the software is now in use in over 70 power plants in ██████████. While the petitioner's work in ██████████ is notable, the petitioner is no longer working on CFD modeling of gas turbines or heat exchange. As such, he must demonstrate that his past work predicts his future benefit to the national interest through modeling aerosol deposits in the human lung.

██████████ discusses the petitioner's Ph.D. research at ██████████. First, ██████████ explains that the petitioner modified a code that applied the previous simulation data to a new simulation and reduced computation time for executing CFD simulation. ██████████ continues that the petitioner also "investigated the large channel aspect ratio and centrifugal buoyancy forces effect on the fluid flow and heat transfer in the channel with V-shape ribs." While ██████████ notes that the petitioner authored a published article on this subject and praises the petitioner's ability in planning and executing complex CFD simulations, he does not explain how this work has influenced the field.

██████████ next addresses the impractical aspects of testing "the high speed flow at high rotating speed gas turbines." ██████████ continues:

[The petitioner] performed the CFD modeling and rendered the difficult experiments to be realized in the computer simulation. [The petitioner] also brilliantly improved our in-house simulation code by taking account of the rotating effect in arbitrary coordinate system. He applied the equation of momentum and Reynolds stress transport in rotating frame at curvilinear coordinate system and dramatically strengthened our ability to simulate very complex rotating conditions. Applying the improved code, [the petitioner] simulated the two-pass channel with/without ribs that is very common in the rotating gas turbine and successfully overcame many difficult issues: turbulence, non-inertia frame, rib disturbing and bending channel.

██████████ notes that the petitioner presented this work and that the *Journal of Heat Transfer* published the petitioner's article on this subject. While ██████████ confirms that this work improved ██████████ in-house code, he does not explain how this work has had a wider influence in the field of CFD modeling.

Finally, ██████████ discusses the petitioner's work modeling pin-fin channels in gas turbines. ██████████ asserts that simulating a single pin-fin in channel is a challenge and that the petitioner "performed the multiple pin-fins in the rotating frame" by applying "the Multi-blocks Grids and Chimera technique to build the structured grid." ██████████ further asserts that the petitioner's simulation "showed good agreement" with experimental data. ██████████ notes that the petitioner or a coauthor presented the work

and that the petitioner authored a published article on this topic. Once again, while [REDACTED] praises the petitioner's ability to succeed in this modeling challenge, he does not explain the influence of this work. For example, he does not identify any other research team utilizing the petitioner's model.

[REDACTED], Head of the Department of Energy Sciences at the [REDACTED] in [REDACTED], explains that he knows of the petitioner's work through his publications. [REDACTED] asserts that the petitioner authored two published articles on his computer code that can capture and take into account the rotating effect on the turbine transport in a rotating frame. [REDACTED] does not suggest that he or any other independent research team is using this computer code. [REDACTED] further asserts that the petitioner's use of the Multi-blocks Grids and Chimera technique was "unprecedented" and produced results that were in "very good agreement" with the experimental study. Once again, [REDACTED] does not suggest that he or any other independent research team is using this technique.

[REDACTED] asserts that the U.S. Department of Energy (DOE) funded the petitioner's research, that the petitioner presented this work to DOE and that DOE "warmly accepted" the petitioner's work. The record contains no letters from officials at DOE explaining the department's use of the petitioner's models and techniques. Most research, in order to receive funding, must present some benefit to the general pool of scientific knowledge. It does not follow that every researcher working with a government grant inherently serves the national interest to an extent that justifies a waiver of the job offer requirement.

[REDACTED], Head of the Department of Mechanical and Nuclear Engineering at [REDACTED], asserts that she met the petitioner at a conference in Nevada. [REDACTED] explains that the petitioner's Ph.D. research area is important because of the challenge of increasing energy efficiency of gas turbines while maintaining or increasing the turbine safety performance by cooling the turbine blades. She provides information similar to that discussed above, asserting that the petitioner was the first to discover "the characteristics and rotation numbers of heat transfer enhancement at high Reynolds numbers." Any Ph.D. thesis or postdoctoral research, in order to be accepted for graduation, publication or funding, must offer new and useful information to the pool of knowledge. It does not follow that every researcher who performs original research that adds to the general pool of knowledge inherently serves the national interest to an extent that justifies a waiver of the job offer requirement. [REDACTED] does not affirm that she has used the petitioner's models or techniques or identify any independent laboratory that has done so.

[REDACTED], an assistant professor at [REDACTED], discusses the petitioner's work in [REDACTED]'s research group. [REDACTED] explains that realistic geometric models are needed to understand how cigarette smoke aerosols accumulate in the upper respiratory system. [REDACTED] continues:

[The petitioner] developed a mathematical model and a set of computer source code to construct the complex respiratory system. [The petitioner's] work has dramatically improved the accuracy of the respiratory system simulation and provided a cutting-edge

tool for lung disease research. His computer source code is so far the most efficient one in the field.

does not, however, provide examples of independent lung disease researchers using the petitioner's computer source code.

further states that the petitioner "developed another CFD model to answer an [*sic*] very important question why cigarette smoke aerosols deposit at a higher rate in the upper respiratory tract than dilute stable particles with similar size." explains the hypothesis that "at high concentration, significant complex hydrodynamic interactions can occur between aerosol particles or droplets." states that the function of the petitioner's "new model is to capture the process of the particle falling onto the upper respiratory tract." While asserts that the petitioner's model successfully predicted the falling velocity of cluster particles and notes that the petitioner presented these results at a conference, he does not explain how this work is already being utilized or considered for application in the field.

asserts that he met the petitioner at an American Association for Aerosol Research conference in Florida. discusses the importance of the petitioner's area of current research, which is not contested. then asserts that tracing the smoke particles movement "is beyond a physician's reach." concludes that the petitioner's research "helps physicians and medical scientists to understand the detail of smoke particle[s] in the respiratory system and predict the locations where the trauma is most likely to happen."

More specifically, asserts that the petitioner "developed a morphologically realistic bifurcation (MRB) with exact mathematical description." concludes that this model is more realistic than other models and "paved a fundamental step for the accurate prediction of the deposit of smoke particles in the respiratory system." does not provide examples of independent research teams applying or even considering applying the petitioner's model.

next asserts that the petitioner "developed a CFD cloud model to clarify why cigarette smoke aerosols deposit at a higher rate in the upper respiratory tract than dilute stable particles of similar size." While asserts that the petitioner's model is predictive and "helps doctors to understand the health risk of high-concentrated smoke particles on the respiratory system," he does not provide specific examples of doctors using the petitioner's models and does not claim to do so himself.

Finally, explains that the petitioner's models are relevant to studying the efficacy of inhalation therapies. Specifically, asserts that the petitioner "developed a 3-D, unsteady lung model to capture the flow-particle physics in the breathing lung." While speculates that doctors "can rely" on the petitioner's models, he provides no examples of doctors who have done so or are even considering doing so.

The Board of Immigration Appeals (the Board) has held that testimony should not be disregarded simply because it is "self-serving." *See, e.g., Matter of S-A-*, 22 I&N Dec. 1328, 1332 (BIA 2000) (citing cases). The Board also held, however: "We not only encourage, but require the introduction of corroborative testimonial and documentary evidence, where available." *Id.* If testimonial evidence lacks specificity, detail, or credibility, there is a greater need for the petitioner to submit corroborative evidence. *Matter of Y-B-*, 21 I&N Dec. 1136 (BIA 1998).

The opinions of experts in the field are not without weight and have been considered above. USCIS may, in its discretion, use as advisory opinions statements submitted as expert testimony. *See Matter of Caron International*, 19 I&N Dec. 791, 795 (Comm'r. 1988). However, USCIS is ultimately responsible for making the final determination regarding an alien's eligibility for the benefit sought. *Id.* The submission of letters from experts supporting the petition is not presumptive evidence of eligibility; USCIS may, as we have done above, evaluate the content of those letters as to whether they support the alien's eligibility. *See id.* at 795; *see also Matter of V-K-*, 24 I&N Dec. 500, n.2 (BIA 2008) (noting that expert opinion testimony does not purport to be evidence as to "fact"). USCIS may even give less weight to an opinion that is not corroborated, in accord with other information or is in any way questionable. *Id.* at 795; *see also Matter of Soffici*, 22 I&N Dec. 158, 165 (Comm'r. 1998) (citing *Matter of Treasure Craft of California*, 14 I&N Dec. 190 (Reg'l. Comm'r. 1972)).

While the petitioner continues to work with CFD modeling, he is working in a very different area of this modeling than his past work. Specifically, he is no longer modeling heat transfer in gas turbines but aerosol deposits in the human lung. While we do not question that some elements of CFD modeling is the same in both areas, the petitioner must demonstrate that his ability to succeed with gas turbines is continuing in the area of the human lung. As of the date of filing, the petitioner had yet to publish any articles concerning his aerosol research and had made only a single presentation of this work. Thus, it appears premature to conclude that the petitioner will benefit the national interest with this work.

As is clear from a plain reading of the statute, it was not the intent of Congress that every person qualified to engage in a profession in the United States should be exempt from the requirement of a job offer based on national interest. Likewise, it does not appear to have been the intent of Congress to grant national interest waivers on the basis of the overall importance of a given profession, rather than on the merits of the individual alien. On the basis of the evidence submitted, the petitioner has not established that a waiver of the requirement of an approved alien employment certification will be in the national interest of the United States.

The burden of proof in these proceedings rests solely with the petitioner. Section 291 of the Act, 8 U.S.C. § 1361. The petitioner has not sustained that burden.

This denial is without prejudice to the filing of a new petition by a United States employer accompanied by an alien employment certification certified by the Department of Labor, appropriate supporting evidence and fee.

**ORDER:** The appeal is dismissed.