



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

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

MATTER OF Y-Y-

DATE: MAR. 11, 2016

APPEAL OF NEBRASKA SERVICE CENTER DECISION

PETITION: FORM I-140, IMMIGRANT PETITION FOR ALIEN WORKER

The Petitioner, a computational engineering researcher, seeks classification as a member of the professions holding an advanced degree. *See* Immigration and Nationality Act (the Act) § 203(b)(2), 8 U.S.C. § 1153(b)(2). In addition, the Petitioner seeks a national interest waiver of the job offer requirement that is normally attached to this classification. *See* § 203(b)(2)(B)(i) of the Act, 8 U.S.C. § 1153(b)(2)(B)(i). This discretionary waiver allows U.S. Citizenship and Immigration Services (USCIS) to provide an exemption from the requirement of a job offer, and thus a labor certification, when doing so serves the national interest.

The Director, Nebraska Service Center, denied the petition. The Director concluded that the Petitioner established his eligibility as an advanced degree professional, but did not establish that a waiver of the job offer requirement is in the national interest.

The matter is now before us on appeal. In his appeal, the Petitioner asserts that the Director placed undue emphasis on his citation history in analyzing his eligibility for the national interest waiver. He submits a brief and copies of documents already in the record.

Upon *de novo* review, we will sustain the appeal.

I. LAW

To establish eligibility for a national interest waiver, a petitioner must first demonstrate his or her qualification for the underlying visa classification, as either an advanced degree professional or an individual of exceptional ability in the sciences arts or business. Because this classification normally requires that the individual's services be sought by a U.S. employer, a separate showing is required to establish that a waiver of the job offer requirement is in the national interest.

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

- (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) National interest waiver. . . . the Attorney General¹ 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.

Neither the statute nor the pertinent regulations define the term “national interest.” Additionally, Congress did not provide a specific definition of “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).

Matter of New York State Department of Transportation, 22 I&N Dec. 215, 217-18 (Act. Assoc. Comm’r 1998) (*NYSDOT*), set forth several factors which must be considered when evaluating a request for a national interest waiver. First, a petitioner must demonstrate that he or she seeks employment in an area of substantial intrinsic merit. *Id.* at 217. Next, a petitioner must show that the proposed benefit will be national in scope. *Id.* Finally, the petitioner seeking the waiver must establish that he or she 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.

While the national interest waiver hinges on prospective national benefit, a petitioner’s assurance that he or she will, in the future, serve the national interest cannot suffice to establish prospective national benefit. *Id.* at 219. Rather, a petitioner must justify projections of future benefit to the national interest by establishing a history of demonstrable achievement with some degree of influence on the field as a whole. *Id.* at 219, n.6.

¹ Pursuant to section 1517 of the Homeland Security Act of 2002 (“HSA”), Pub. L. No. 107-296, 116 Stat. 2135, 2311 (codified at 6 U.S.C. § 557 (2012)), any reference to the Attorney General in a provision of the Act describing functions that were transferred from the Attorney General or other Department of Justice official to the Department of Homeland Security by the HSA “shall be deemed to refer to the Secretary” of Homeland Security. *See also* 6 U.S.C. § 542 note (2012); 8 U.S.C. § 1551 note (2012).

(b)(6)

Matter of Y-Y-

II. ANALYSIS

In addition to finding that the Petitioner qualifies as an advanced degree professional, the Director determined that his proposed work as a computational engineering researcher has substantial intrinsic merit and that the benefits of such work are national in scope. The only finding at issue in this matter is whether the Petitioner established sufficient influence on his field to meet the third prong of the *NYSDOT* national interest analysis.

The Petitioner filed the Form I-140, Immigrant Petition for Alien Worker, on April 18, 2014, at which time he was working as a research associate at [REDACTED]. In an introductory letter, the Petitioner indicated that his research focuses on developing and implementing complex computer codes to simulate the properties and interactions of fluids and solid state matter. He asserted that his original contributions “have significantly advanced and influenced the field of computational engineering science,” and he submitted letters from colleagues and independent professionals attesting to the importance of his research.

The Petitioner indicated that one of his contributions to computational engineering was his development of a novel method for simulating the molecular dynamic behaviors of carbon nanotubes (CNTs), which are an important component of nanotechnology. A letter from [REDACTED] professor at the [REDACTED] stated that the Petitioner’s “reduced-order general continuum method” saves computational time and cost compared with other reduced-order continuum methods, and yields highly accurate results. He attested that this method “greatly advanced past longstanding barriers” to efficiently investigating CNTs, and has had a significant impact on the nanoelectromechanical systems industry, which creates nanoscale devices with a wide variety of potential applications. In another letter, [REDACTED] a former guest editor for the [REDACTED] stated that the Petitioner’s method represents a “breakthrough” and a “valuable tool for researchers,” and that an article he published in [REDACTED] “has attracted wide attention from the field” including a high number of downloads. The Petitioner provided a printout from the ScienceDirect website indicating that his work was one of the “Top 25 Hottest Articles” in [REDACTED] for the period from April to June 2011. The Petitioner’s co-author and supervisor, [REDACTED] further indicated that he has received “many invitations from other technical journals on nanotechnology to publish our work” on this research.

Another contribution that the Petitioner discussed in his introductory letter was his development of a computational system for simulating fluid-structure interaction (FSI), which occurs when fluid flow causes deformation to a structure, and which affects many engineering and biological technologies such as bridges, wind turbines, heart valves, and others. His supervisor, [REDACTED] indicated that the [REDACTED] requested and funded the Petitioner’s research on this topic for the purpose of simulating the effects of blast explosion shock waves, and that his technology has given the [REDACTED] the ability to quantify potential [REDACTED] in a simulation environment, rather than through expensive and time-consuming lab testing. [REDACTED] a senior technologist at [REDACTED] stated that he is “aware that [the Petitioner’s] computer program has been used by the [REDACTED] to provide accurate

(b)(6)

Matter of Y-Y-

and fast predictions of the impacts on a dummy operator's [REDACTED] inside a [REDACTED] ground vehicle under a blast wave attack." He described the Petitioner's methodology as having "great practical implications for several industry sectors and the scientific community," and attested that it "is providing invaluable information" to his own areas of interest in advanced aerospace simulation and design methodologies. The Petitioner also submitted a copy of a [REDACTED] 2013, article entitled "[REDACTED]" from the website [REDACTED] summarizing an article that he published in the [REDACTED]

The Petitioner indicated that his work has been applied by "major industrial companies." He submitted a letter from [REDACTED] engineering manager at [REDACTED], a company that engineers components and systems for powertrain applications. [REDACTED] indicated that the Petitioner has worked on several proprietary projects funded by [REDACTED] including the use of FSI analysis to optimize the thermal design of a fan drive system. He stated that [REDACTED] has used the Petitioner's model to optimize its designs and increase fuel efficiency. The Petitioner also provided a letter from [REDACTED] an engineer at the [REDACTED] which develops and supplies filtration systems and other equipment to the automotive and mechanical engineering industries. [REDACTED] stated that he came across the Petitioner's [REDACTED] article on CNT simulation when searching for a method to calculate stresses and deformations in very thin membranes. He indicated that he has used the Petitioner's computer code in his work, and that his method "has had a great impact on research operation in developing new types of products such as filters." In addition, in an email to the Petitioner, [REDACTED] senior systems engineer at a liquid handling products company, [REDACTED], stated that he came across a paper of the Petitioner's that was directly relevant to his work on modeling reciprocating pumps with checkball valves, and requested advice on applying the research to his own work.

Further documentation supporting the Form I-140 included copies of four journal articles and eight conference presentations that the Petitioner authored, excerpts from four papers by other researchers citing to his work, and evidence regarding the frequency with which his published work has been downloaded. In addition to the "Top 25 Hottest Articles" printout mentioned above, the Petitioner provided certificates indicating that one of his publications was ranked among the 25 most downloaded articles in the [REDACTED] from October 2012 to March 2013, and evidence that another of his articles had been downloaded 454 times. He submitted an article from [REDACTED] entitled [REDACTED] describing increasing the use of download counts as a measure of academic excellence and publication impact.² The Petitioner also provided a letter from [REDACTED] detailing the funding sources for his research, documentation that he served as an editorial board member and a peer reviewer for academic journals, copies of communications from students expressing interest in joining his research group, a research award from [REDACTED] and evidence of his senior membership in the [REDACTED]

² The article acknowledges the potential for download numbers to be skewed and inflated, but states that [REDACTED] has developed filtering technology to ensure that its own download counts are reliable.

(b)(6)

Matter of Y-Y-

In a September 9, 2014, request for evidence (RFE), the director noted that the Petitioner is required to demonstrate a history of achievement with some degree of influence on the field as a whole, and requested additional evidence regarding citation of the Petitioner's work by other researchers. In response, the Petitioner stated that "citations are but one form of evidence to demonstrate a petitioner's research on the field," and he submitted copies of several unpublished AAO decisions in which we found a petitioner to have established sufficient influence without a strong citation history.³

The Petitioner indicated that he works for a [REDACTED] research center that is funded by government organizations, research foundations, and private companies, and that the research is "proprietary in nature, and therefore unlikely to result in well-cited journal publications." In a new letter, his supervisor, [REDACTED] discussed the differences between industrial application research, which is driven by needs in the industry, and pure academic research, which is motivated by the researcher's own inclinations. He stated that results of the Petitioner's research are delivered directly to the organizations that requested and funded the work, and are "most often earmarked 'proprietary' by the sponsoring company," preventing publication of key technological information. He further contended that the impact of industrial research is best measured by its direct practical application, rather than its use by academic researchers.

[REDACTED] indicated that, in addition to providing useful research results to the sponsoring companies, the Petitioner was able to publish aspects of his findings in articles and conference papers, and that they have proven useful to others in the industry. The Petitioner submitted a letter from [REDACTED] detailing the company's use of the Petitioner's [REDACTED] and stating that "it is the only model we have found in the open literature that is of real, practical use." He further attests that, "because checkball pumps are universally used in industry, [the Petitioner's] model is of definite benefit for the industry as a whole."

The Director denied the Form I-140 on April 17, 2014, determining that the Petitioner had not established sufficient impact on his field to meet the third prong of the *NYSDOT* national interest analysis. The Director found that the record did not establish a noteworthy record of publication or citation, or demonstrate that the Petitioner's presentations at conferences had been influential in his field. The decision also stated that the submitted letters indicated that the Petitioner's research had impacted the authors' own work, but did not indicate "that the [his] contributions have had widespread influence on the field as a whole."

In his brief on appeal, the Petitioner asserts that the Director "failed to apply flexibility" to allow for the industrial nature of his research work, and that the decision did not adequately articulate the deficiencies in the submitted evidence regarding the influence of the Petitioner's work. He also notes that, under *NYSDOT*, the required level of past achievement is not "widespread influence on

³ We note that while 8 C.F.R. § 103.3(c) provides that AAO precedent decisions are binding on all CIS employees in the administration of the Act; unpublished decisions are not similarly binding.

the field as a whole,” but rather “some degree of influence on the whole.” He contends that the record demonstrates broad application of his research by the industry, and he provides copies of all evidence previously submitted.

As stated above, the analysis set forth in *NYSDOT* requires a petitioner to demonstrate that he or she will serve the national interest to a substantially greater degree than would an available U.S. worker having the same minimum qualifications. To do this, a petitioner must establish “a past history of demonstrable achievement with some degree of influence on the field as a whole.” *Id.* at 219, n. 6.

While a strong citation history can be useful in establishing an extent of an individual’s influence on the field as a whole, the Petitioner in this instance has provided an explanation for his modest citation history, and that explanation is supported by the record. Further, the evidence as a whole supports the Petitioner’s assertions that his work has found broad practical application in industry settings. The submitted letters describe with specificity how his work has been used by the organizations that funded his research as well as by independent companies, and they also attest to its wider application in the field. For these reasons we find the record sufficient to demonstrate that the Petitioner has had a degree of influence on the field as a whole.

III. CONCLUSION

The burden is on the Petitioner to show eligibility for the immigration benefit sought. Section 291 of the Act, 8 U.S.C. § 1361; *Matter of Otiende*, 26 I&N Dec. 127, 128 (BIA 2013). The Petitioner in this case has established by a preponderance of the evidence that he qualifies as an advanced degree professional, and that a waiver of the job offer requirement will be in the national interest of the United States. Accordingly, the appeal will be sustained.

ORDER: The appeal is sustained.

Cite as *Matter of Y-Y-*, ID# 15940 (AAO Mar. 11, 2016)