



U.S. Citizenship
and Immigration
Services

**Identifying data deleted to
prevent clearly unwarranted
invasion of personal privacy**

PUBLIC COPY



B5

FILE: [REDACTED] Office: VERMONT SERVICE CENTER Date: **OCT 07 2005**
EAC 04 197 50174

IN RE: Petitioner: [REDACTED]
Beneficiary: [REDACTED]

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:

SELF-REPRESENTED

INSTRUCTIONS:

This is the decision of the Administrative Appeals Office in your case. All documents have been returned to the office that originally decided your case. Any further inquiry must be made to that office.

Mari Johnson

S Robert P. Wiemann, Director
Administrative Appeals Office

DISCUSSION: The Director, Vermont Service Center, denied the employment-based immigrant visa petition. The matter is now before the Administrative Appeals Office on appeal. The appeal will be sustained and the petition will be approved.

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. The petitioner seeks employment as an aerogel chemist at [REDACTED] Marlborough, Massachusetts. The petitioner asserts that an exemption from the requirement of a job offer, and thus of a labor 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.

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 director determined that the petitioner qualifies for classification as a member of the professions holding an advanced degree. While the petitioner has claimed eligibility as an alien of exceptional ability, the petitioner offered no specific arguments or evidence in support of that claim, and a finding of exceptional ability would be of no further advantage to the beneficiary in this proceeding. The sole issue in contention is whether the petitioner has established that a waiver of the job offer requirement, and thus a labor certification, is in the national interest.

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).

Supplementary information to the regulations implementing the Immigration Act of 1990 (IMMACT), published at 56 Fed. Reg. 60897, 60900 (November 29, 1991), states:

The Service [now Citizenship and Immigration Services (CIS)] 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 Dept. of Transportation, 22 I&N Dec. 215 (Comm. 1998), has set forth several factors which must be considered when evaluating a request for a national interest waiver. First, it must be shown that the alien seeks employment in an area of substantial intrinsic merit. Next, it must be shown that the proposed benefit will be national in scope. 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.

It must be noted that, while the national interest waiver hinges on prospective national benefit, it clearly must be established that the alien’s past record justifies projections of future benefit to the national interest. 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.

A job offer letter from Aspen Aerogels describes the petitioner’s duties: “This position will initially involve synthesis and process development for low-density aerogel beads, powders and composites using sodium silicates as a starting material. You will be one of the key people to establish our program in low cost aerogels suitable for mass production. Your job will not be limited to this area and there will be many opportunities for career growth.”

The petitioner submits several witness letters. Representative [REDACTED] states that the petition “is an excellent opportunity for our nation to offer an extraordinary scientist an opportunity to contribute to our national interest through his research on flexible aerogel materials.” Professor [REDACTED] of Brown University states:

[The petitioner] joined my laboratory as a PhD candidate in the Department of Chemistry at Brown University in 1996, carrying out research on the preparation and characterization of composite aerogel molecules. Aerogels are a class of highly porous, low-density solid materials that have a variety of potential applications. [The petitioner] made several original breakthroughs in synthesis and characterization of novel composite aerogels. His thesis work . . . offers a general method of preparing aerogels that combine several desired properties, which include transparency, high surface area, and chemical reactivity. . . . [T]hese materials can be used as components of detectors, sensors, absorbing agents, and optical devices. [The

petitioner] has also been at the forefront of research on revealing the microstructure of the composite aerogel materials. . . . [The petitioner] and his collaborator, [REDACTED] at Argonne National Laboratories, developed a novel mathematic model that . . . is extremely valuable in characterizing the microstructure of acid-catalyzed aerogel materials. Based on this model, [the petitioner] was able to reveal for the first time the effects of the polymer on the composite aerogel microstructure. These findings are very important for future design and development of composite aerogel materials.

[REDACTED] director of product research and development at Aspen Aerogels, states:

As a key member of Aspen's R&D team, [the petitioner] is one of the top scientists in the field of flexible aerogel formulation. His innovative research has brought us an extremely important approach to manufacture our revolutionary flexible aerogel products at significantly lower costs. . . .

In [the petitioner's] research, he has developed novel formulations that reduce the raw material costs of flexible aerogel to less than one tenth of the previous level. He further developed a bench top scale process that is suitable for commercial scale production. [The petitioner] is currently the lead scientist in Aspen's scale-up process of the new formulations, and has successfully demonstrated the production of prototype products. This innovation significantly reduces the production cost of flexible aerogel and brings immediate practical impact on the field.

Potential savings for the US government and Aspen's commercial customers based on this innovation will be enormous. This significant achievement is one of the most important milestones in flexible aerogel development, and establishes [the petitioner's] status as one of the top scientists in the field of flexible aerogel formulation.

[REDACTED] director of government business at [REDACTED] states:

[The petitioner] developed formulations and processes to produce flexible aerogels based on water glass; a raw material that costs less than 1/10 of our current-generation raw material. This is a major breakthrough in our flexible aerogel product development. [The petitioner] is currently leading Aspen's research on pilot-scale production materials based on these new formulations and processes. The formulations and processes developed by him are the cornerstone of our next-generation product, which will be significantly less expensive than our current-generation product.

Improving the cost effectiveness of flexible aerogel materials is one of the central elements to most of our government projects. The technology developed by [the petitioner] is of critical importance to these projects. For example, [the petitioner] is currently working as one of the two leading investigators in a DOE funded phase II project . . . to develop an aerogel-based, highly-efficient thermal insulation material for commercial and residential ductwork

insulation. . . . Based on the aerogel technology developed by [the petitioner], low cost flexible aerogel blankets that meet the project requirements have been successfully fabricated. . . .

[The petitioner] has also worked as the project manager of a NASA funded project . . . [that] has successfully developed a novel composite flexible aerogel product that has excellent mechanical properties. [The petitioner] and his collaborators in this project are nominated for two NASA Tech Brief Awards for this significant invention.

The petitioner has also “submitted three highly rated research proposals” to the Department of Defense and NASA with regard to “novel applications of functionalized aerogel materials in chemical/biological decontamination.” There is no indication that these proposals have yielded any research funds.

NASA researchers discuss Aspen Aerogels’ involvement in various projects, but they make no specific mention of the petitioner. Thus, by themselves, the witness letters do not indicate that the petitioner’s work has attracted significant notice except from his professor and his employer.

The petitioner also submits copies of various published materials. Some of these appear to be, essentially, self-promoting press releases from the petitioner’s employer. Other, more significant documents will be discussed below in the context of the appeal.

The director denied the petition, acknowledging the intrinsic merit and national scope of the petitioner’s work, but finding that the petitioner has not shown that his work has had a substantial impact on his field of endeavor. For example, the petitioner has submitted copies of his published work, but he has not shown that other researchers have heavily cited this material. The director also stated that an alien does not qualify for the waiver simply by working on an important project.

On appeal, the petitioner argues that the director should have issued a request for evidence prior to the denial, as required by 8 C.F.R. § 103.2(b)(8). There is some merit to this argument, as the cited regulation indicates that such a notice is required “where there is no evidence of ineligibility, and . . . the Service finds that the evidence submitted . . . does not fully establish eligibility for the requested benefit.”

The petitioner also asserts: “The director . . . overlooked important testimonial evidence and important outside documentary evidence that indicates the petitioner’s standing in his field.” Among this evidence are materials from *R&D Magazine*, indicating that Aspen Systems, Inc., Aspen Aerogels, Inc., and the NASA Kennedy Space Center shared an “R&D 100 Award” in 2003 “for the development of Flexible Aerogel Superinsulation, Selected by *R&D Magazine* as One of the 100 Most Technologically Significant New Products of the Year.” Other materials in the record independently attest to the prestige of the R&D 100 Award.

An article in *R&D Magazine* does not mention the petitioner, but indicates that the research team “has overcome” the two limitations that have heretofore prevented commercialization of aerogel insulation technology, specifically “high manufacturing costs and extreme brittleness.” This indicates significant

independent recognition of Aspen's reduction of manufacturing costs for flexible aerogels, and officials close to the project have stressed that the petitioner was not only involved with this project, but was a key member, personally responsible for innovations that made the final outcome possible. Thus, when the disparate pieces of evidence are brought together, a picture emerges to show that the petitioner, as an individual, is personally responsible for much of what the industry has recognized as a significant breakthrough. This supports the petitioner's employers' claims to the effect that the petitioner is a leading figure in this type of research. A job offer letter from Aspen Aerogels describes the petitioner's duties: "This position will initially involve synthesis and process development for low-density aerogel beads, powders and composites using sodium silicates as a starting material. You will be one of the key people to establish our program in low cost aerogels suitable for mass production."

The petitioner submits several witness letters. [REDACTED] of Brown University states:

[The petitioner] joined my laboratory as a PhD candidate in the Department of Chemistry at Brown University in 1996, carrying out research on the preparation and characterization of composite aerogel molecules. Aerogels are a class of highly porous, low-density solid materials that have a variety of potential applications. [The petitioner] made several original breakthroughs in synthesis and characterization of novel composite aerogels. His thesis work . . . offers a general method of preparing aerogels that combine several desired properties, which include transparency, high surface area, and chemical reactivity. . . . [T]hese materials can be used as components of detectors, sensors, absorbing agents, and optical devices. [The petitioner] has also been at the forefront of research on revealing the microstructure of the composite aerogel materials. . . . [The petitioner] and his collaborator, [REDACTED] at Argonne National Laboratories, developed a novel mathematic model that . . . is extremely valuable in characterizing the microstructure of acid-catalyzed aerogel materials. Based on this model, [the petitioner] was able to reveal for the first time the effects of the polymer on the composite aerogel microstructure. These findings are very important for future design and development of composite aerogel materials.

[REDACTED] director of product research and development at Aspen Aerogels, states:

As a key member of Aspen's R&D team, [the petitioner] is one of the top scientists in the field of flexible aerogel formulation. His innovative research has brought us an extremely important approach to manufacture our revolutionary flexible aerogel products at significantly lower costs. . . .

In [the petitioner's] research, he has developed novel formulations that reduce the raw material costs of flexible aerogel to less than one tenth of the previous level. He further developed a bench top scale process that is suitable for commercial scale production. [The petitioner] is currently the lead scientist in Aspen's scale-up process of the new formulations, and has successfully demonstrated the production of prototype products. This innovation significantly reduces the production cost of flexible aerogel and brings immediate practical impact on the field.

Potential savings for the US government and Aspen's commercial customers based on this innovation will be enormous. This significant achievement is one of the most important milestones in flexible aerogel development, and establishes [the petitioner's] status as one of the top scientists in the field of flexible aerogel formulation.

[REDACTED], director of government business at [REDACTED], states:

[The petitioner] developed formulations and processes to produce flexible aerogels based on water glass; a raw material that costs less than 1/10 of our current-generation raw material. This is a major breakthrough in our flexible aerogel product development. [The petitioner] is currently leading Aspen's research on pilot-scale production materials based on these new formulations and processes. The formulations and processes developed by him are the cornerstone of our next-generation product, which will be significantly less expensive than our current-generation product.

Improving the cost effectiveness of flexible aerogel materials is one of the central elements to most of our government projects. The technology developed by [the petitioner] is of critical importance to these projects. For example, [the petitioner] is currently working as one of the two leading investigators in a DOE funded phase II project . . . to develop an aerogel-based, highly-efficient thermal insulation material for commercial and residential ductwork insulation. . . . Based on the aerogel technology developed by [the petitioner], low cost flexible aerogel blankets that meet the project requirements have been successfully fabricated. . . .

[The petitioner] has also worked as the project manager of a NASA funded project . . . [that] has successfully developed a novel composite flexible aerogel product that has excellent mechanical properties. [The petitioner] and his collaborators in this project are nominated for two NASA Tech Brief Awards for this significant invention.

The petitioner has also "submitted three highly rated research proposals" to the Department of Defense and NASA with regard to "novel applications of functionalized aerogel materials in chemical/biological decontamination." There is no indication that these proposals have yielded any research funds, and no evidence to support the assertion that the proposals have been "highly rated."

NASA researchers discuss Aspen Aerogels' involvement in various projects, but they make no specific mention of the petitioner. Thus, by themselves, the witness letters do not indicate that the petitioner's work has attracted significant notice except from his professor and his employer.

The petitioner also submits copies of various published materials. Some of these appear to be, essentially, self-promoting press releases from the petitioner's employer. Other, more significant documents will be discussed below in the context of the appeal.

The director denied the petition, acknowledging the intrinsic merit and national scope of the petitioner's work, but finding that the petitioner has not shown that his work has had a substantial impact on his field of endeavor. For example, the petitioner has submitted copies of his published work, but he has not shown that other researchers have heavily cited this material. The director also stated that an alien does not qualify for the waiver simply by working on an important project.

On appeal, the petitioner argues that the director should have issued a request for evidence prior to the denial, as required by 8 C.F.R. § 103.2(b)(8). There is some merit to this argument; as the cited regulation indicates that such a notice is required "where there is no evidence of ineligibility, and . . . the Service finds that the evidence submitted . . . does not fully establish eligibility for the requested benefit."

The petitioner also asserts: "The director . . . overlooked important testimonial evidence and important outside documentary evidence that indicates the petitioner's standing in his field." Among this evidence are materials from *R&D Magazine*, indicating that Aspen Systems, Inc., Aspen Aerogels, Inc., and the NASA Kennedy Space Center shared an "R&D 100 Award" in 2003 "for the development of Flexible Aerogel Superinsulation, Selected by *R&D Magazine* as One of the 100 Most Technologically Significant New Products of the Year." Other materials in the record independently attest to the prestige of the award.

An article in *R&D Magazine* does not mention the petitioner, but indicates that the research team "has overcome" the two limitations that have heretofore prevented commercialization of aerogel insulation technology, specifically "high manufacturing costs and extreme brittleness." This indicates significant independent recognition of Aspen's reduction of manufacturing costs for flexible aerogels, and officials close to the project have stressed that the petitioner was not only involved with this project, but was a key member, personally responsible for innovations that made the final outcome possible. Thus, when the disparate pieces of evidence are brought together, a picture emerges to show that the petitioner, as an individual, is personally responsible for much of what the industry has recognized as a significant breakthrough. This supports the petitioner's employers' claims to the effect that the petitioner is a leading figure in this type of research.

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 field of research, rather than on the merits of the individual alien. That being said, the evidence in the record establishes that the scientific community recognizes the significance of this petitioner's research rather than simply the general area of research. The benefit of retaining this alien's services outweighs the national interest that is inherent in the labor certification process. Therefore, on the basis of the evidence submitted, the petitioner has established that a waiver of the requirement of an approved labor 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 sustained that burden. Accordingly, the decision of the director denying the petition will be withdrawn and the petition will be approved.

ORDER: The appeal is sustained and the petition is approved.