



U.S. Citizenship
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Services

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FILE:

WAC 04 249 52276

Office: CALIFORNIA SERVICE CENTER

Date: MAY 10 2006

IN RE:

Petitioner:

Beneficiary:

PETITION: Immigrant Petition for Alien Worker as an Alien of Extraordinary Ability Pursuant to Section 203(b)(1)(A) of the Immigration and Nationality Act, 8 U.S.C. § 1153(b)(1)(A)

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.

§ Robert P. Wiemann, Director
Administrative Appeals Office

DISCUSSION: The employment-based immigrant visa petition was denied by the Director, California Service Center, and is now before the Administrative Appeals Office on appeal. The appeal will be dismissed.

The petitioner seeks classification as an employment-based immigrant pursuant to section 203(b)(1)(A) of the Immigration and Nationality Act (the Act), 8 U.S.C. § 1153(b)(1)(A), as an alien of extraordinary ability in the sciences. The director determined the petitioner had not established the sustained national or international acclaim necessary to qualify for classification as an alien of extraordinary ability.

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

(1) Priority Workers. -- Visas shall first be made available . . . to qualified immigrants who are aliens described in any of the following subparagraphs (A) through (C):

(A) Aliens with Extraordinary Ability. -- An alien is described in this subparagraph if --

(i) the alien has extraordinary ability in the sciences, arts, education, business, or athletics which has been demonstrated by sustained national or international acclaim and whose achievements have been recognized in the field through extensive documentation,

(ii) the alien seeks to enter the United States to continue work in the area of extraordinary ability, and

(iii) the alien's entry to the United States will substantially benefit prospectively the United States.

As used in this section, the term "extraordinary ability" means a level of expertise indicating that the individual is one of that small percentage who have risen to the very top of the field of endeavor. 8 C.F.R. § 204.5(h)(2). The specific requirements for supporting documents to establish that an alien has sustained national or international acclaim and recognition in his or her field of expertise are set forth in the regulation at 8 C.F.R. § 204.5(h)(3). The relevant criteria will be addressed below. It should be reiterated, however, that the petitioner must show that he has earned sustained national or international acclaim at the very top level.

This petition, filed on September 13, 2004, seeks to classify the petitioner as an alien with extraordinary ability as a materials science and engineering researcher. The petitioner earned his Ph.D. in Materials Science and Engineering from the University of California, Irvine (UCI) in 2003. At the time of filing, the petitioner was working at the University of California, Davis (UCD) as a postgraduate researcher.

The regulation at 8 C.F.R. § 204.5(h)(3) indicates that an alien can establish sustained national or international acclaim through evidence of a one-time achievement (that is, a major, international recognized award). Barring the alien's receipt of such an award, the regulation outlines ten criteria, at least three of which must be satisfied for an alien to establish the sustained acclaim necessary to qualify as an alien of extraordinary ability. The petitioner has submitted evidence pertaining to the following criteria.

Documentation of the alien's membership in associations in the field for which classification is sought, which require outstanding achievements of their members, as judged by recognized national or international experts in their disciplines or fields.

In order to demonstrate that membership in an association meets this criterion, the petitioner must show that the association requires outstanding achievement as an essential condition for admission to membership. Membership requirements based on employment or activity in a given field, minimum education or experience, standardized test scores, grade point average, recommendations by colleagues or current members, or payment of dues, do not satisfy this criterion as such requirements do not constitute outstanding achievements. In addition, it is clear from the regulatory language that members must be selected at the national or international level, rather than the local or regional level. Therefore, membership in an association that evaluates its membership applications at the local or regional chapter level would not qualify. Finally, the overall prestige of a given association is not determinative; the issue here is membership requirements rather than the association's overall reputation.

The petitioner submitted evidence of his membership in the Minerals, Metals and Materials Society. The record, however, includes no evidence of the membership bylaws or the official admission requirements of this society to demonstrate that admission to membership requires outstanding achievement or that the petitioner was evaluated by national or international experts in consideration of his admission to membership

Evidence of the alien's participation, either individually or on a panel, as a judge of the work of others in the same or an allied field of specification for which classification is sought.

The petitioner initially submitted correspondence reflecting that he was invited to review eleven manuscripts for *Materials Science and Engineering: A* from December 2000 to September 2004. It is noted that ten of these requests originated from the petitioner's academic advisor, Dr. [REDACTED], Dean, College of Engineering, UCD, and Principal Editor, *Materials Science and Engineering: A*.¹ The regulation at 8 C.F.R. § 204.5(h)(3), however, provides that a petition for an alien of extraordinary ability must be accompanied by evidence that the alien has sustained national or international acclaim and that his or her achievements have been recognized in the field of expertise. Evidence of the petitioner's participation as a judge must be evaluated in terms of these requirements. In this instance, we cannot ignore that the petitioner's academic advisor was the editor of the requesting journal. Further, the correspondence submitted by the petitioner indicates that he is not actually a member of the editorial board of *Materials Science and Engineering: A*, but rather was assigned the task of manuscript reviews by others holding editorial responsibility. With respect to this journal, the role played by the petitioner appears clearly junior or subsidiary to that of actual editorial staff. While not dispositive, the lesser role, even in behalf of more than one editor, does not support a claim to being one of that small percentage who have risen to the very top of the field of endeavor. See 8 C.F.R. § 204.5(h)(2).

We further note that peer review of manuscripts is a routine element of the process by which articles are selected for publication in scholarly journals. Occasional participation in peer review of this kind does not

¹ Dr. [REDACTED] states: "I was [the petitioner's] academic advisor when he was a Ph.D. student at the University of California, Irvine from 1998 to 2003. Now [the petitioner] is working in my research group as a postgraduate researcher."

automatically demonstrate that the petitioner has earned sustained national or international acclaim at the very top of his field. Reviewing manuscripts is recognized as a professional obligation of scientists who publish themselves in scientific journals. Normally a journal's editorial staff will enlist the assistance of numerous professionals in the field who agree to review submitted papers. It is common for a publication to ask several reviewers to review a manuscript and to offer comments. The publication's editorial staff may accept or reject any reviewer's comments in determining whether to publish or reject submitted papers.

On appeal, the petitioner submits correspondence reflecting that Dr. [REDACTED] requested his review of eight additional manuscripts for *Materials Science and Engineering: A* from September 2004 through July 2005. The petitioner also submitted a May 19, 2005 e-mail requesting that he review an article for *Modelling and Simulation in Materials Science and Engineering*. The review requests submitted on appeal, however, came into existence subsequent to the petition's filing date. A petitioner must establish eligibility at the time of filing. 8 C.F.R. § 103.2(b)(12); see *Matter of Katigbak*, 14 I&N Dec. 45 (Comm. 1971). Subsequent developments in the petitioner's career cannot retroactively establish that he was already eligible for the classification sought as of the filing date.

Without evidence in existence at the time of filing that sets the petitioner apart from others in his field, such as evidence that he has peer-reviewed an unusually large number of manuscripts for publication in various scientific journals, received multiple independent requests for his services from a substantial number of journals, or served in an editorial position for a distinguished journal (in the same manner as Dr. Lavernia, for example), we cannot conclude the petitioner meets this criterion.

Evidence of the alien's original scientific, scholarly, artistic, athletic, or business-related contributions of major significance in the field.

The petitioner submitted several letters in support of the petition.

Dr. [REDACTED] states:

I knew of [the petitioner's] work in the field of spray forming before he joined my research group. At that time, [the petitioner] worked as a research metallurgist with the National Research Center for Nonferrous Metals Composites at the Beijing General Research Institute for Nonferrous Metals in China. [The petitioner] had successfully developed a free-fall gas atomization technique. He invented a brand new type of free-fall gas atomization atomizer, which has been granted a patent in China entitled "Two-layer free-fall gas atomization atomizer." This type of free-fall gas atomization atomizer is now widely used throughout the world. This invention not only facilitates the atomizer scanning to control spray-formed geometry, but also broadens the application of spray-forming technique to refractory materials.

Dr. [REDACTED] Professor of Materials Science and Engineering, Tongji University, Shanghai, China, states:

In 1997, [the petitioner] invented a new type of free-fall gas atomization atomizer. By using this type of atomizer, "upward spray" phenomenon can be thoroughly avoided during free-fall atomization. Nowadays, this type of free-fall gas atomization atomizer has been adopted worldwide. This

achievement is a new breakthrough in the field of spray forming and of gas atomization. As a result, [the petitioner] earned a Chinese patent “Two-layer free-fall gas atomization atomizer.”

In support of Dr. [REDACTED] and Dr. [REDACTED] statements, the petitioner submitted evidence showing that he holds a Chinese patent for his atomizer.

Dr. [REDACTED] is the Chair Professor of Mechanical Engineering and the Director of the Metal Processing Institute (MPI) in Worcester, Massachusetts.² Dr. [REDACTED] states:

[The petitioner] is working on advanced materials processing techniques; though I do not know him, I am familiar with his work — published in the literature, and am most impressed with his accomplishments.

I am most impressed by [the petitioner’s] creative research work on a novel materials processing to fabricate metallic strip products, “spray rolling.” [The petitioner] has discovered that spray rolling can be optimized into a metallic strip manufacturing technique with an ultra-high production rate, leading to a significant saving in the production cost of metallic strips. This discovery is absolutely a significance [sic] contribution and has a profound impact on manufacturing industry of metallic products worldwide. This discovery has been presented in the paper “The selection of the spray deposition rate during the spray rolling process” published in *Metallurgical and Materials Transaction A*, the most prestigious international journal in the field of materials.

Furthermore, [the petitioner] has made another significant accomplishment, in which a unique approach has been discovered to fragment oxides in the metallic matrix into nanometric (1 to 10 nanometers) oxide particles, leading to the synthesis of metal matrix composites reinforced by nanometric oxide particles. This original contribution of major significance has also been published in *Metallurgical and Materials Transaction A* (the paper “Modeling of oxide dispersions in reactively processed Al”). For the past decades, materials scientists have been devoting themselves to reducing the oxide particle size in order to increase the strength of metal matrix composites reinforced by oxide particles. However, the current minimum size of oxide particles only attains the range of 10 to 100 nanometers and is extremely difficult to be further reduced. Accordingly, the oxide particle size has become a bottleneck to further increase the strength of this class of composites. It is a unique approach discovered by [the petitioner] that fragments oxides in the metallic matrix into nanometric oxide particles. Nanometric oxide particles will improve the strength of this class of composites to an ultra-high value, which is much higher than that of metal matrix composites reinforced by 10 to 100 nanometers oxide particles. Thus, this original contribution is a significant breakthrough in the synthesis of metal matrix composites and creates a new class of metal matrix composites that possesses an ultra-high strength. This contribution will significantly benefit aeronautical and aerospace industry in the United States.

² Documentation submitted in response to the director’s request for evidence describes the MPI as “an industry-university alliance dedicated to advancing the state of the art in the metal-processing industry.”

Dr. [REDACTED], Head of the Multiphase Research Group at the Institute for Materials Science, and Professor at the University of Bremen, Germany, states

I have never met [the petitioner] in person, but I have been following [the petitioner's] publications in spray forming in renowned journals

* * *

[The petitioner] is a pioneer researcher of a novel spray forming technique, "spray rolling." In the paper "The transient to steady-state transition during the spray-rolling process," spray-rolled geometry has been simulated for the first time worldwide. This original contribution is necessary to attain a consistently flat strip profile. In the paper "The selection of the spray deposition rate during the spray rolling process," the selection of spray deposition rate during spray rolling process has been theoretically studied for the first time worldwide. The results in this paper are indispensable for stable and continuous spray rolling operation and the optimization of microstructures and properties of the spray-rolled strip products. Of particular importance in this paper is [the petitioner's] discovery that spray rolling is capable of processing metallic strips at an ultra-high production rate, which is much higher than the production rate of the ingot metallurgy approach and of continuous casting approach widely used at present. One of the most important and encouraging prospects of this discovery that I can predict is to significantly reduce the production cost of metallic strip products, such as aluminum and steel strips that make up a high percentage in all of aluminum and steel products. The application of this discovery will bring a revolution to fabrication of metallic strip products worldwide. It is no doubt that this discovery is a contribution of major significance in materials engineering.

Dr. [REDACTED] Senior Scientist, Riso National Laboratory, Denmark, states:

I have no personal ties with [the petitioner]. It is [the petitioner's] highly impressive publications on "spray rolling" that draws [sic] my attention to his exceptional research work in this new technique.

* * *

It is particularly worthy of emphasizing [sic] that . . . [the petitioner] has discovered that "spray rolling" technique inherently possesses a capability to fabricate metallic strips at an extremely high production rate, leading to a remarkable saving in manufacturing cost. This original discovery will certainly provide the most cost effective approach for the production of metallic strips compared to the approaches suggested by all other researchers. Consequently, this discovery will have a significant impact on the technological progress in metallic strip products around the globe.

Dr. [REDACTED] Chief, Mechanical Engineering Department, University of Chile, states:

[The petitioner] has discovered that spray rolling can be used to process metallic strip products with an ultra-high production rate, resulting in a remarkable saving in the production cost of metallic strips. This discovery is definitely a contribution of major significance and has a tremendous impact on manufacturing industry of metallic products all over the world. At present, all other materials

researchers on spray rolling only utilize rapid solidification during spray rolling to optimize microstructure and to avoid subsequent homogenization and multi-step hot rolling processes. Compared to all other materials researchers, [the petitioner] is the first to realize that rapid solidification can be used to thoroughly eliminate slow cooling, which results in a low production rate during conventional strip production techniques. It is this unique idea that leads to the aforementioned significant contribution.

* * *

[The petitioner] has designed a unique approach to fragment the oxides in the metal matrix into nanometric (1 to 10 nanometers) oxide particles. As a result, metal matrix composites reinforced by nanometric oxide particles can be synthesized. It is predicted that the strength and ductility of metal matrix composites will be significantly increased with nanometric oxide particles. Thus, this achievement is a major contribution. In fact, materials researchers worldwide have been making efforts to attain the oxide particle size below 10 nanometers. They have been using equiaxed oxide particles of more than 1 micrometer as the starting point of fragmentation. When equiaxed particles are fragmented to the size of 10 to 100 nanometers, it is very difficult to make a further fragmentation although severe plastic deformation is used. No substantial progress has been made until [the petitioner] created this unique method. In his method, [the petitioner] creatively selected plate shape as the initial geometry of the oxides and incorporate severe plastic deformation (e.g., ball milling and other severe plastic deformation techniques) into the oxide fragmentation, generating nanometric (1 to 10 nanometers) oxide particles. Hence, [the petitioner's] accomplishment is a breakthrough in the synthesis of particle reinforced metal matrix composites.

President, Metals Technology Inc., Northridge, California, states:

In his effort to optimize the production rate of the spray rolling technique, [the petitioner] has discovered that spray rolling can be used to fabricate metallic strips at an extremely high production rate, leading to very low production cost. This discovery directly benefits the metallic materials (such as aluminum and steels) industry of the United States, especially in a globalized economy.

* * *

In addition to his distinguished contributions in spray rolling, [the petitioner] has made a groundbreaking achievement in the fabrication of metal matrix composites (MMC's). [The petitioner] has created a unique method to break oxides in the metal matrix into nanometric (from 1 to 10 nanometers) oxide dispersions enabling the synthesis of nanometric oxide reinforced MMC's. . . . This contribution is of major significance because nanometric oxide reinforced MMC's have strength much higher than that of 10 to 100 nanometer oxide reinforced MMC's currently possessing the highest strength levels in this class of composites. This major contribution is of tremendous significance to the fabrication of advanced metallic materials such as those used in the latest generation fighter planes. . . . At present, there are no readily available materials to meet the stringent requirements for these critical components. Compared to amorphous aluminum alloys the materials scientists are now developing for use in structural components, nanometric oxide reinforced

aluminum MMC's can save a very large amount of expensive metal elements which are required in the synthesis of amorphous aluminum alloys. This will result in a significant reduction in production costs.

We find that the record adequately demonstrates the petitioner's contributions are important not only to the research institutions where he has worked, but throughout the greater field. Leading scientists from around the world have acknowledged the value of the petitioner's work and its major significance in the materials science and engineering field. Therefore, we find that the petitioner's evidence satisfies this criterion.

Evidence of the alien's authorship of scholarly articles in the field, in professional or major trade publications or other major media.

We concur with the director's finding that the petitioner's evidence is adequate to satisfy this criterion.

Evidence of the display of the alien's work in the field at artistic exhibitions or showcases.

The petitioner initially claimed that two of his conference presentations satisfied this criterion. This particular criterion, however, applies to the visual arts rather than scientific or engineering research. In the fields of science and engineering, acclaim is generally not established by the mere act of presenting one's work at a conference. The record includes no documentation demonstrating that the presentation of one's work is unusual in the petitioner's field or that the invitation to present at conferences where the petitioner spoke was a privilege extended to only a few top scientists or engineers. Many professional fields regularly hold conferences and symposia to present new work, discuss new findings, and to network with other professionals. These conferences are promoted and sponsored by professional associations, businesses, educational institutions, and government agencies. Participation in such events, however, does not elevate the petitioner above almost all others in his field at the national or international level. The record includes no evidence showing that the petitioner's presentations commanded an unusual level of attention in comparison to the other conference participants or that the petitioner has served as a keynote speaker at a national science or engineering conference.

In this case, we concur with the director's finding that the petitioner has failed to demonstrate that he meets at least three of the criteria at 8 C.F.R. § 204.5(h)(3).

Review of the record does not establish that the petitioner has distinguished himself to such an extent that he may be said to have achieved sustained national or international acclaim or to be within the small percentage at the very top of his field. The evidence is not persuasive that the petitioner's achievements set him significantly above almost all others in his field at the national or international level. Therefore, the petitioner has not established eligibility pursuant to section 203(b)(1)(A) of the Act and the petition may not be approved.

The burden of proof in visa petition proceedings remains entirely with the petitioner. Section 291 of the Act, 8 U.S.C. § 1361. Here, the petitioner has not sustained that burden. Accordingly, the appeal will be dismissed.

ORDER: The appeal is dismissed.