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U.S. Citizenship
and Immigration
Services

B4

[redacted]

FILE: [redacted] Office: CALIFORNIA SERVICE CENTER Date: NOV 18 2004
WAC 03 060 51213

IN RE: Petitioner: [redacted]
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:

[redacted]

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 sustained and the petition will be approved.

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 December 13, 2002, seeks to classify the petitioner as an alien with extraordinary ability as a geophysics researcher. At the time of filing, the petitioner was working as a research scientist in the Seismological Laboratory at the California Institute of Technology.

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. We find that the petitioner's evidence satisfies the following three criteria.

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 from the editorial offices of *Contributions to Mineralogy and Petrology*, *Earth and Planetary Science Letters*, and *Geochimica et Cosmochimica Acta* indicating that the petitioner was requested to review a total of three manuscripts for publication.

In response to the director's request for evidence, the petitioner submitted two letters from the editor of *High Temperatures – High Pressures* (dated January 5, 2003 and March 14, 2003) requesting that the petitioner review papers for publication. This evidence came into existence subsequent to the petition's filing date. *See Matter of Katigbak*, 14 I&N Dec. 45, 49 (Comm. 1971). A petitioner must possess the necessary qualifications as of the filing date of the visa petition; a petition cannot be approved at a future date after the petitioner becomes eligible under a new set of facts.

We note here 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 the peer review process does not automatically demonstrate that an alien researcher has earned sustained national or international acclaim at the very top of his field. It is noted in this case, however, that although the petitioner does not appear to have reviewed a substantial number of manuscripts (the petitioner provided first-hand evidence of only three manuscript reviews as of the petition's filing date), the petitioner did receive what appear to be independent requests for his services from at least four different journals.

In addition, a letter from Dr. [redacted] Reader in Mineral Physics, University of Cambridge, United Kingdom, states: "I was so impressed with [the petitioner's] work that I asked him to review several articles for *American Mineralogist* while I served as an associate editor of the publication." Also, a letter from Dr. [redacted] Professor, University of Marne la Vallee, Paris, France, and Consulting Professor, Department of Geological and Environmental Sciences, Stanford University, indicates that "*Geological Magazine* valued [the petitioner's] work enough to ask him to review a book."

More persuasive than the petitioner's work as reviewer of scientific manuscripts, however, was the initial evidence reflecting that the petitioner has been requested by national organizations to review various proposals for research grants. For example, the petitioner presented two letters from [redacted] Program Director, Petrology and Geochemistry, National Science Foundation (NSF), requesting that the petitioner review research proposals submitted to the Division of Earth Sciences of the NSF for possible funding. In addition to the NSF proposals, the petitioner was also requested to assess an application for a research grant submitted to the Natural Environment Research Council of the United Kingdom.

Therefore, as a whole, we find that the evidence presented is adequate to satisfy this criterion.

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

The petitioner provided several witness letters in support of the petition. We cite representative examples here.

Dr. [redacted] Professor of Geophysics, Seismological Laboratory, California Institute of Technology, in describing the petitioner's prior work at Cornell University, states:

> [The petitioner] conducted research on the pressure-temperature-volume equation of state for liquids. He developed a new technique which allowed him to study electrolyte solutions at increased pressures and temperatures not previously available for direct observation. His new technique utilized a hydrothermal diamond anvil cell (HDAC). He then applied his new technique and discovered that the extrapolation of the previous work was seriously in error at the high pressures (100 MPa) and temperatures (1000 °C) of his studies. He demonstrated that there was a tremendous deviation from earlier extrapolation. [The petitioner] went on to develop a new set of data that lead to a formula for the density of water at high pressure and temperature, which is now commonly accepted. His HDAC technique alone is a highly significant contribution . . . . His work was published in . . . *Review of Scientific Instruments*.

The record contains a citation index showing that this article was cited 59 times.

In describing the petitioner's work at the Bayerisches Geoinstitut, Germany, Dr. [redacted] states:

> In his two years at Bayerisches, [the petitioner] continued as a prolific scientist. First, he completed an important study on melts, particularly focusing on structure of hydrous silicate melts. Specifically, he examined if water in such melts had had two different structures. [The petitioner] first demonstrated the speciation, *in situ*, in hydrous silicate melts at increased temperatures and pressures using infrared spectroscopy and HDAC. His work demonstrated that both the H_2O and OH hydroxyl species are present in melt but he showed that the ratio of these two species in hydrous melt was much greater than ever previously thought. This work was published in *American Minerologist*, a leading journal in mineral physics.

The record contains a citation index showing that this article was cited 62 times.

In describing the petitioner's work at the University of Cambridge, Dr. [redacted] states:

> [The petitioner] was examining the phase relations of hydrous silicate melt. Many early studies of hydrous silicate melts between 1920's and 1960's inferred the possible closure of the miscibility gap between the more viscous silicate melt and the less viscous solution. However, no direct evidence was available. [The petitioner's] experimental finding provided the first direct evidence of such closure. This work has been reported in *Nature*, one of the world's leading scientific journals.

The record contains a citation index showing that this article was cited 26 times.

Dr. Geophysicist, Geophysical Laboratory, Carnegie Institution of Washington, and elected member of the National Academy of Science (U.S.A.), states:

> Through his doctoral research, [the petitioner] developed a novel technique that allowed him to study electrolyte solutions at increased pressures and temperatures not previously available.... When this technique was applied to prior work in the area, [the petitioner] discovered that there were numerous errors in extrapolation at high pressures and temperatures. He used his results from these experiments to develop a new set of data which led to the creation of a new formula for the density of water at high pressures and temperatures. His original technique is commonly used today, not only in the field of geophysics, but throughout the scientific community. . .

Dr. Geologist, U.S. Geological Survey, U.S. Department of the Interior, states that "the significance of the petitioner's work is shown by the fact that it is being used by several groups of scientists around the nation, and beyond." Dr adds:

> Exxon Production Research Company in Houston is applying the HDAC to study the thermal evolution of crude oil. Another group at Virginia Polytechnic Institute and State University is using the HDAC to research the fluid inclusion samples from ore minerals. Scientists in Nova Scotia, Canada at St. Francis Xavier University have adopted [the petitioner's] original techniques in their work with x-ray absorption spectroscopy using synchrotron radiations.

Dr. Professor, University of Marne la Vallee, Paris, France, and Consulting Professor, Department of Geological and Environmental Sciences, Stanford University, states: "I became aware of [the petitioner's] work through his numerous publications. I realized that the hydrothermal diamond anvil cell (HDAC) technique that [the petitioner] invented could be used to further my own research. Thus, I integrated his technique into my work."

Several of the witnesses assert that the petitioner's publication record shows that his work has significantly impacted his field. Publication, by itself, is not a strong indication of impact, because the act of publishing an article does not compel others to read it or absorb its influence. Yet publication can nevertheless provide a very persuasive and credible avenue for establishing outside reaction to the petitioner's work. If a given article in a prestigious journal (such as the *Proceedings of the National Academy of Sciences of the U.S.A.)* attracts the attention of other researchers, those researchers will cite the source article in their own published work, in much the same way that the petitioner himself has cited dozens of sources in his own articles. Numerous independent citations would provide firm evidence that other researchers have been influenced by the petitioner's work and are familiar with it.

The record contains citation indices showing that the three articles discussed above by Dr. have been cited an aggregate total of 147 times. In this case, the large number of citations of the petitioner's published work bolsters the witnesses' claims that the petitioner's findings are of major significance in the geophysics field. 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. Scientific experts from throughout the world have acknowledged the value of the petitioner's work and its significance to the scientific community. 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.

The petitioner submitted evidence of his authorship of several articles appearing in publications such as *Pure and Applied Geophysics*, *Review of Scientific Instruments*, *Journal of Applied Physics*, *American Mineralogist*, and *Nature*.

In referring to the petitioner's article that was published in *Nature*, Dr. Hans Keppler, Executive Director, Institute of Earth Sciences, University of Tubingen, Germany, states:

> This work was published in *Nature*, which is together with *Science* the most prestigious journal in all fields of science. Less than one percent of all scientists working at universities and research institutes ever manage to publish one piece of work in this journal during all of their life. A publication in *Nature* is generally regarded as definitive proof of excellence in the scientific community worldwide.

The petitioner submitted evidence showing that six of his published articles have garnered an aggregate total of 185 citations. As previously observed, when judging the influence and impact that the petitioner's published work has had, the very act of publication is not as reliable a gauge as is the citation history of the published works. Publication alone may serve as evidence of originality, but it is difficult to conclude that a published article is important or influential if there is little evidence that other researchers have relied upon the petitioner's findings. In this case, however, the large number of citations of the petitioner's published articles demonstrates widespread international interest in, and reliance on, his work. These citations show that many other researchers have acknowledged the petitioner's influence and found his work to be significant. Therefore, we concur with the director that that the petitioner's evidence satisfies this criterion.

In this case, the petitioner has satisfied three of the regulatory criteria required for classification as an alien of extraordinary ability. Pursuant to the statute and regulations as they are currently constituted, the petitioner qualifies for the classification sought.

In review, while not all of the petitioner's evidence carries the weight imputed to it by counsel, the totality of the evidence establishes an overall pattern of sustained national acclaim and extraordinary ability in the field of geophysics. The petitioner has also established that he seeks to continue working in the same field in the United States and that his entry into the United States will substantially benefit prospectively the United States. Therefore, the petitioner has overcome the stated grounds for denial and thereby established eligibility for the benefits sought under section 203 of the Act.

The burden of proof in visa petition proceedings remains entirely 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.