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FILE: [REDACTED]
EAC 03 029 52593

Office: VERMONT SERVICE CENTER

Date: **SEP 16 2005**

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

PETITION: Immigrant Petition for Alien Worker as Outstanding Professor or Researcher Pursuant to Section 203(b)(1)(B) of the Immigration and Nationality Act, 8 U.S.C. § 1153(b)(1)(B)

ON BEHALF OF PETITIONER:



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, Vermont Service Center, and is now before the Administrative Appeals Office on appeal. The appeal will be dismissed.

The petitioner is a company engaged in the development, manufacture and supply of process control instruments and systems. It seeks to classify the beneficiary as an outstanding researcher pursuant to section 203(b)(1)(B) of the Immigration and Nationality Act (the Act), 8 U.S.C. § 1153(b)(1)(B). The petitioner seeks to employ the beneficiary permanently in the United States as a senior applications engineer. The director determined that the petitioner had not established that the beneficiary is recognized internationally as outstanding in his academic field, as required for classification as an outstanding researcher.

On appeal, the petitioner submits new reference letters, evidence that the beneficiary's patents have been referenced in other patent applications and complete copies of the beneficiary's patents.

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):

(B) Outstanding Professors and Researchers. -- An alien is described in this subparagraph if --

(i) the alien is recognized internationally as outstanding in a specific academic area,

(ii) the alien has at least 3 years of experience in teaching or research in the academic area, and

(iii) the alien seeks to enter the United States --

(I) for a tenured position (or tenure-track position) within a university or institution of higher education to teach in the academic area,

(II) for a comparable position with a university or institution of higher education to conduct research in the area, or

(III) for a comparable position to conduct research in the area with a department, division, or institute of a private employer, if the department, division, or institute employs at least 3 persons full-time in research activities and has achieved documented accomplishments in an academic field.

The regulation at 8 C.F.R. § 204.5(i)(3) states that a petition for an outstanding professor or researcher must be accompanied by:

(ii) Evidence that the alien has at least three years of experience in teaching and/or research in the academic field. Experience in teaching or research while working on an advanced degree

will only be acceptable if the alien has acquired the degree, and if the teaching duties were such that he or she had full responsibility for the class taught or if the research conducted toward the degree has been recognized within the academic field as outstanding. Evidence of teaching and/or research experience shall be in the form of letter(s) from former or current employer(s) and shall include the name, address, and title of the writer, and a specific description of the duties performed by the alien.

This petition was filed on October 11, 2002 to classify the beneficiary as an outstanding researcher in the field of engineering. Therefore, the petitioner must establish that the beneficiary had at least three years of research experience in the field as of that date, and that the beneficiary's work has been recognized internationally within the field as outstanding.

The regulation at 8 C.F.R. § 204.5(i)(3)(i) states that a petition for an outstanding professor or researcher must be accompanied by "[e]vidence that the professor or researcher is recognized internationally as outstanding in the academic field specified in the petition." The regulation lists six criteria, of which the petitioner must satisfy at least two. It is important to note here that the controlling purpose of the regulation is to establish international recognition, and any evidence submitted to meet these criteria must therefore be to some extent indicative of international recognition. More specifically, outstanding professors and researchers should stand apart in the academic community through eminence and distinction based on international recognition. The regulation at issue provides criteria to be used in evaluating whether a professor or researcher is deemed outstanding. 56 Fed. Reg. 30703, 30705 (1991).

On appeal, counsel does not challenge the director's conclusion that the record contains no evidence relating to the first four criteria: documentation of the alien's receipt of major prizes or awards for outstanding achievement in the academic field pursuant to 8 C.F.R. § 204.5(i)(3)(i)(A); documentation of the alien's membership in associations in the academic field which require outstanding achievements of their members pursuant to 8 C.F.R. § 204.5(i)(3)(i)(B); published material in professional publications written by others about the alien's work in the academic field pursuant to 8 C.F.R. § 204.5(i)(3)(i)(C); and evidence of the alien's participation, either individually or on a panel, as the judge of the work others in the same or allied field pursuant to 8 C.F.R. § 204.5(i)(3)(i)(D). We concur with the director that the record contains no evidence relating to these criteria. The remaining two criteria will be discussed below.

Evidence of the alien's original scientific or scholarly research contributions to the academic field.

Initially, the petitioner submitted several patents for the beneficiary's innovations, evidence that purportedly demonstrated citation of the beneficiary's work and reference letters from the beneficiary's immediate circle of colleagues. Noting the lack of evidence of frequent citation and letters from more independent references, the director concluded that the petitioner had not demonstrated the beneficiary's influence in the field internationally.

On appeal, counsel asserts that the petition was approvable as filed, but that evidence is being submitted to address the director's concerns. Specifically, the petitioner submits new reference letters, complete patents and evidence that the beneficiary's patents have been referenced in other patent applications. We will review all of the evidence of record below.

Obviously, the petitioner cannot satisfy this criterion simply by listing the beneficiary's past projects, and demonstrating that the beneficiary's work was "original" in that it did not merely duplicate prior research. Research work that is unoriginal would be unlikely to secure the beneficiary a master's degree, let alone classification as an outstanding researcher. Because the goal of the regulatory criteria is to demonstrate that the beneficiary has won international recognition as an outstanding researcher, it stands to reason that the beneficiary's research contributions have won comparable recognition. To argue that all original research is, by definition, "outstanding" is to weaken that adjective beyond any useful meaning, and to presume that most research is "unoriginal."

In a similar vein, the evidence that the beneficiary holds several patents for his inventions establishes that he is a prolific inventor, but the very existence of the patents does not show that the beneficiary's inventions are more significant than those of others in his field.¹ To establish the significance of the beneficiary's work, we turn to experts in his field, whose letters we discuss below.

The beneficiary earned his engineering degree at the East China University in 1982 and then worked at the Shanghai Radio 14 Factory until 1998. The beneficiary then obtained his Master's degree in engineering at the Tokyo Metropolitan University in 1993. Upon receiving his graduate degree, the beneficiary went to work for Tokyo Electron LTD (TEL). In 2001, the beneficiary began his employment with the petitioner.

[REDACTED] who met the beneficiary at the Shanghai Radio 14 Factory, asserts that the beneficiary participated in a joint program between the factor and Fudan University "to develop a high frequency MOSFET transistor." The beneficiary contributed to the success of the project by using "plasma sputtering and employing Mo as electrode."

[REDACTED] the beneficiary's thesis supervisor at the Tokyo Metropolitan University, asserts that the beneficiary studied the electrical property of hydrogen atoms in gallium arsenide (GaAs), a key material for high-speed electron Internet devices. The beneficiary "found that the hydrogen atom incorporated during plasma processing of GaAs acts as a donor state." The beneficiary presented this work at a 1992 symposium on the subject.

The petitioner submitted two letters from senior managers at TEL, [REDACTED] and [REDACTED]. The letters provide similar information about the beneficiary's work with semiconductor process technology and equipment design at TEL. Specifically, the beneficiary developed a cleaning process while working on the Reactive Ion Enhanced (RIE) plasma Chemical Vapor Deposition (CVD) equipment project. In addition, the beneficiary developed a pulsed microwave and RF system for Electron Cyclotron Resonance (ECR) equipment. This system, controlled by a synchronized signal, was initially suggested to TEL as a project by the Massachusetts Institute of Technology (MIT) and has not been duplicated outside of TEL. The beneficiary presented this work at a 1999 SEMICON conference in China and was responsible for the commercialization of the product by TEL. Subsequently, the beneficiary directed the research and development team for TEL's MSD project, inventing pioneering methods for treating "high k" materials, including using radicals from plasma.

¹ Addressing a lesser classification than the one sought in these proceedings, this office has stated that a patent is not necessarily evidence of a track record of success with some degree of influence over the field as a whole. See *Matter of New York State Dep't. of Transp.*, 22 I&N Dec. 215, 221 n. 7, (Comm. 1998). Rather, the significance of the innovation must be determined on a case-by-case basis. *Id.*

Dr. [REDACTED] Vice President and Chief Technical Officer for the petitioner, discusses the beneficiary's work for the petitioner on "a number of critical projects." Specifically, the beneficiary worked on the SEMATECH program with a semiconductor chip company to develop a process recipe that resulted in a 30 percent cost reduction in a semiconductor production tool. The beneficiary also "authored two invention disclosures" at the petitioning company "on novel semiconductor processing devices."

Dr. [REDACTED] Senior Director of the Advanced Technology Group at the petitioning company, adds that the SEMATECH program also aimed to reduce the emission of perfluorocompound (PFC) gases, implicated in global warming. The resulting process demonstrated reduced PFC emissions. Dr. [REDACTED] a senior scientist/engineering manager at the petitioning company, adds that the beneficiary's approach uses high-density plasma and carefully controlled gas chemistry to reduce PFC gas molecules to harmless products.

[REDACTED] President of Solid State Technology Japan (SST), explains that he established SST in 1978 under a licensing agreement with the U.S. publication of the same name. SST now introduces U.S. high-tech companies and semiconductor products to the Japanese market. Mr. [REDACTED] asserts that he has known the beneficiary for 10 years, but does not explain how he became aware of the beneficiary's work. Mr. [REDACTED] reiterates the information discussed above and asserts that the beneficiary's expertise and experience are rare.

On appeal, the petitioner submits new letters. Counsel asserts that the opinions expressed in the new letters "are based upon the authors' review of the Beneficiary's publications, the patents held by the beneficiary and, and above all, on the authors' knowledge of the Beneficiary's reputation in the international scientific community." The authors themselves, however, do not claim to have become aware of the beneficiary's work through his international reputation. Moreover, while they may not be the beneficiary's collaborators, three out of the four reside in Massachusetts, the location of the petitioning company where the beneficiary works. The final letter is from a professor at Virginia Tech. Thus, these letters are not necessarily indicative of the beneficiary's reputation beyond the East Coast of the United States. We acknowledge the high level of the authors' credentials, although we note that their credentials dwarf the beneficiary's own. We will consider the content of these letters.

Dr. [REDACTED] professor at MIT and a member Fellow of the American Vacuum Society, indicates that he has carefully reviewed the beneficiary's credentials and summarizes the beneficiary's employment history, already documented in the record. Dr. [REDACTED] further discusses the beneficiary's discoveries and where they have been presented, but does not explain how these discoveries have changed the field.

Dr. [REDACTED] professor at Virginia Tech, Director of Power IT Lab and a fellow of the Institute of Electrical and Electronics Engineers (IEEE). Dr. [REDACTED] that the beneficiary has a "renowned international reputation," having worked on critical semiconductor processes at TEL. Dr. [REDACTED] further asserts that the beneficiary's new plasma source, when released, "will play a crucial role in both the flat-panel display industry and in the reduction of PFC production within the semiconductor industry."

Larry Bourget, Director of RTP Systems at Axcelis Technologies in Massachusetts, asserts that his letter, requested by a colleague, is based on a review of the beneficiary's qualifications in comparison with the qualifications of those Mr. [REDACTED] has hired. Mr. [REDACTED] asserts that the beneficiary's presentations have garnered international attention, but does not indicate that he personally knows of the beneficiary's work from such a presentation. Mr. [REDACTED] concludes that the beneficiary's high-density plasma is an "elegant solution"

for PFC emissions “with industry-wide applications,” but does not indicate that Axcelis, or any other company, is interested in licensing or otherwise applying the technology.

Dr. [REDACTED] Chairman and Chief Executive Office of NEXX Systems in Massachusetts, indicates that he is a fellow of the American Physical Society. Dr. [REDACTED] indicates that he met the beneficiary while the beneficiary was working at TEL, but does not explain the circumstances. Dr. [REDACTED] provides similar information to that discussed above.

The petitioner submitted Japanese and U.S. patents listing the beneficiary as one of the inventors. The petitioner also initially submitted what purports to be evidence of citations. The document, however, merely lists an article authored by the beneficiary and a patent for one of the beneficiary’s innovations. These items are not evidence of the any interest in the beneficiary’s work other than by the beneficiary himself.

On appeal, the petitioner submits evidence that his patents have been cited as references in nine other patent applications other than his own. The petitioner did not submit the first page of these patents listing the inventors and the companies securing the property right.² Thus, the petitioner has not established the significance of these citations. For examples references in other patent applications filed by TEL are poor evidence of the beneficiary’s influence beyond his employer.³ Moreover, the record lacks evidence indicating that nine citations are significant in the field. We cannot ignore that semiconductor processing is a technical field subject to constant progression. Not every innovation that adds to the general pool of knowledge in the field can be considered to have garnered international recognition.

While the beneficiary’s research is no doubt of value, it can be argued that any research must be shown to be original and present some benefit if it is to receive funding and attention from the engineering community. Similarly, any patent application, in order to be approved, must be original. The record, however, does not establish that the beneficiary’s work has garnered international recognition as a contribution to the field as a whole.

Even if we were to accept the citations of the beneficiary’s patents as evidence that his innovations have influenced the field in a manner consistent with international recognition, the beneficiary would only meet one criterion. An alien must meet at least two in order to be eligible for the benefit sought. For the reasons discussed above and below, the petitioner has failed to establish that the beneficiary meets any other criterion.

Evidence of the alien's authorship of scholarly books or articles (in scholarly journals with international circulation) in the academic field.

The petitioner submitted evidence that the beneficiary has authored two published articles and has presented his work at symposiums and conferences. The Association of American Universities’ Committee on Postdoctoral Education, on page 5 of its *Report and Recommendations*, March 31, 1998, set forth its recommended definition

² The full patent application would not be useful as it would contain technical information beyond the expertise of this office.

³ While we are not bound to do so, we accessed the citing patents by number on the website run by the U.S. Patent and Trade Office, www.uspto.gov. That access revealed that of the nine patents citing the beneficiary, three were filed by TEL and the remaining six were filed by a total of four other companies.

of a postdoctoral appointment. Among the factors included in this definition are the acknowledgement that “the appointment is viewed as preparatory for a full-time academic and/or research career,” and that “the appointee has the freedom, and is expected, to publish the results of his or her research or scholarship during the period of the appointment.” Thus, this national organization considers publication of one’s work to be “expected,” even among researchers who have not yet begun “a full-time academic and/or research career.” This report reinforces our position that publication of scholarly articles is not automatically evidence of international recognition; we must consider the research community’s reaction to those articles.

The record contains no evidence that the beneficiary’s articles or presentations have been cited. We are cognizant that intellectual property concerns may legitimately limit an engineer’s publication record. Thus, a limited publication record is not a negative factor for an engineer. That said, the petitioner must still establish that the beneficiary meets two criteria. While the beneficiary’s limited publication record⁴ would not preclude eligibility if the beneficiary met two other criteria, we cannot conclude that the beneficiary’s publication history, consisting of few publications and presentations and no citations, is indicative of or consistent with international recognition. Thus, the petitioner has not established that the beneficiary meets this criterion.

The petitioner has shown that the beneficiary is a talented and prolific researcher, who has won the respect of his collaborators, employers, and mentors, while securing some degree of international exposure for his work. The record, however, stops short of elevating the beneficiary to an international reputation as an outstanding researcher or professor. Therefore, the petitioner has not established that the beneficiary is qualified for the benefit sought.

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. Accordingly, the appeal will be dismissed.

ORDER: The appeal is dismissed.

⁴ We note that Dr. Sawin indicates that he has authored 175 published articles.