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U.S. Department of Homeland Security
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Washington, DC 20536

U.S. Citizenship and Immigration Services

[redacted]

FILE: WAC 02 201 54347 Office: CALIFORNIA SERVICE CENTER Date: APR 15 2004

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.

for Mari Johnson
Robert P. Wiemann, Director
Administrative Appeals Office

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identifying data deleted to prevent clearly unwarranted invasion of personal privacy

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 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 June 6, 2002, seeks to classify the petitioner as an alien with extraordinary ability as a research and development engineer. The petitioner was awarded a Ph.D. in Mechanical Engineering from Drexel University in December 1999. At the time of filing, the petitioner was working as a process engineer for Applied Materials, Inc.

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 that, he claims, meets the following criteria.

> *Documentation of the alien's receipt of lesser nationally or internationally recognized prizes or awards for excellence in the field of endeavor.*

We note here that the petitioner attended Drexel University from 1993 to 1999. The petitioner initially submitted the following evidence:

1. "College of Engineering – Graduate Award" from the Drexel University Chapter of Sigma Xi
2. "Drexel University College of Engineering Award for Graduates (First Place)" (1998)
3. Drexel University College of Engineering "Outstanding Teaching Assistant for 1997/1998"
4. "Third Presidential Award for Graduates" from the Drexel University Chapter of Sigma Xi (1997)

Also submitted was a certificate of "appreciation for participation" in "Tech-Fair – 1989" from the Organizing Committee of the Annual Science Festival at Jadavpur University (where the petitioner earned his bachelor's degree).

The petitioner also provided a certificate indicating that Drexel University elected the petitioner to "Who's Who Among Students in American Universities and Colleges" for the 1998 to 1999 academic year. Information provided by the petitioner from the "Who's Who Among Students" website states that this honor is "conferred by more than 1,900 schools in all 50 states..." Additional documentation contained in the record lists the following eligibility requirements:

- Must be a Junior, Senior, or Graduate student
- Overall GPA of 2.8 or better
- May only receive this honor once

The above awards do not constitute qualifying evidence under this criterion. University study is not a field of endeavor, but, rather, training for future employment in a field of endeavor. Awards based on achievement at one's university are local or institutional in nature and do not constitute nationally recognized awards for excellence in the field of endeavor. A student award may place the petitioner among the top students at his particular school or university, but it offers no meaningful comparison between the petitioner and experienced engineering professionals.

The petitioner also presented a "General Society Student Poster Session Award" (1998) from the Electrochemical Society. On appeal, the petitioner states that "award recipients are not limited to [an] individual school" and that the competition for the award is worldwide in scope. While these observations are supported by a letter from the Electrochemical Society, we cannot ignore additional documentation in the record from the Society stating that this award shall be presented only to "students pursuing work for a degree (e.g., M.S. or Ph.D.) in any college or university" and that all "candidates must submit proof of enrollment in a degree granting program." Therefore, the most established and experienced engineers, who are employed in their own right rather than still working on their degrees, are ineligible for consideration for the award. For this reason, we cannot conclude that winning a "student" award elevates an individual to the very top of his field of endeavor.

For comparison, we note that the petitioner initially provided information from the Electrochemical Society's website describing more than a dozen awards presented by that organization. While the General Society Student Poster Session Award "acknowledges the quality and thoroughness" of a student's work and provides a cash award of $250, awards such as the Acheson Award, Olin Palladium Award, de Nora Award, and the Solid State Science and Technology Award "recognize distinguished contributions to the field" and provide

cash awards of several thousand dollars. The latter awards represent accomplishment in the field rather than student accomplishment and therefore the latter awards would carry far greater weight under this criterion.

In response to the director's request for evidence, the petitioner claimed two additional awards, the General Manager Outstanding Paper Award from Applied Materials, Inc. presented in August 2002 and an "Editor's Choice Best Product Award" from *Semiconductor International* presented in December 2002. This evidence came into existence subsequent to the petition's filing date. *See Matter of Katigbak*, 14 I&N Dec. 45 (Reg. Comm. 1971), in which the Immigration and Naturalization Service (legacy INS) held that aliens seeking employment-based immigrant classification must possess the necessary qualifications as of the filing date of the visa petition. New circumstances that did not exist as of the filing date cannot retroactively establish eligibility as of that date. Aside from the issue of the date that the evidence came into existence, we note that the General Manager Outstanding Paper Award from Applied Materials reflects institutional, rather than national or international, recognition.

In regard to the "Editor's Choice Best Product Award" from *Semiconductor International*, the record contains no first-hand evidence singling out the petitioner as a recipient of this award. Rather, the evidence presented indicates that Applied Material's Dielectric Etch eMAX Centura product was among twelve products similarly recognized in the December 2002 issue of *Semiconductor International* (no evidence has been presented showing that the petitioner's name appears in that issue). A letter from Dr. Yan Ye, Senior Director of Dielectric Etch Technology, Applied Materials, Inc., states only that the petitioner contributed to the improvement of the product "by providing a modified design for the chamber using flow simulation." Dr. Ye's letter does not indicate the number of other individuals at Applied Materials who also contributed to the development of the Dielectric Etch eMAX Centura product, nor does it describe their respective roles.

> *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. In addition, it is clear from the regulatory language that members must be selected at the national or international, rather than the local, level. 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 a certificate from Sigma Xi, The Scientific Research Society, stating that he "was duly elected a Member by the Drexel University Chapter of the Society in the year 1998."

Also submitted was a letter from Dr. Patrick Sculley, Executive Director, Sigma Xi, stating:

> [The petitioner] was duly elected a Full Member of the Sigma Xi Society [in] 1998, by the Drexel University Sigma Xi Chapter. Membership in Sigma Xi is by nomination.... Full membership is conferred upon those who have demonstrated noteworthy achievements in research. The Committee on Qualifications and Membership interpreted this qualification to include primary authorship of two papers.

Dr. Sculley's letter cites Section 2 of the Society's Bylaws, which describes "noteworthy achievement" as follows: "Noteworthy achievement in research specified for election or promotion to full membership, in accordance with article II, Section 3A of the Constitution, must be evidenced by publications, patents, written reports or a thesis or dissertation..." According to the Society's Bylaws, it is apparent that an individual who has published two papers, or who has prepared a master's thesis and a dissertation, is eligible for membership in Sigma Xi. Publication, however, is inherent to scientific research. Thus, the mere publication of scholarly articles cannot automatically demonstrate outstanding achievement in one's field. For this reason, we do not accept the petitioner's argument that "noteworthy achievement" as defined in Sigma Xi's Constitution rises to the same level as "outstanding achievement" as required under this criterion. The record contains no evidence showing that Sigma Xi requires outstanding achievement as an essential condition for admission to membership in the same manner as highly exclusive associations such as (for example) the U.S. National Academy of Sciences. Finally, we note that the petitioner's membership in Sigma Xi was evaluated at the local chapter level (rather than at the national or international level).

On appeal, the petitioner submits evidence of his membership in the Institute of Electrical and Electronics Engineers (IEEE) and American Vacuum Society, but he provides no information regarding their membership requirements. The record contains no evidence showing that these organizations require outstanding achievement as an essential condition for admission to membership or that the petitioner's admission to membership was evaluated by recognized national or international experts.

> *Published materials about the alien in professional or major trade publications or other major media, relating to the alien's work in the field for which classification is sought. Such evidence shall include the title, date, and author of the material, and any necessary translation.*

In general, in order for published material to meet this criterion, it must be primarily about the petitioner and, as stated in the regulations, be printed in professional or major trade publications or other major media. The evidence presented under this criterion consists solely of published research papers that list one of the petitioner's published papers as one of a number of cited references. In the petitioner's field, it is the nature of research work to build upon work that has gone before. In some instances, prior work is expanded upon or supported. In other instances, prior work is superseded by the findings in current research work. In either case, the current researcher normally cites the work of the prior researchers. Clearly this is not the same thing as published material written about an individual's work in the field. This type of material does not discuss the merits of an individual's work, the individual's standing in the field, or any significant impact that his or her work has had on work in the field. Finally, it is noted that the articles citing the petitioner's work similarly referenced numerous other individuals. For these reasons, we find that the citations presented do not constitute qualifying "published materials about the alien." The plain wording of this criterion requires the petitioner to demonstrate that he was the primary subject of the published material. Citations of the petitioner's work will be addressed under a separate criterion.

> *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 a letter dated February 22, 2002 requesting that he review a manuscript submitted to the *Journal of Applied Physics*. The letter states: "If you are unable to review [the manuscript], either pass the manuscript to a knowledgeable colleague or return it immediately and suggest alternate reviewers." The record contains no evidence showing that the petitioner actually completed this review. Also

submitted was a letter from Dr. Bakhtier Farouk, Professor of Mechanical Engineering, Drexel University, who served as the petitioner's former research supervisor. Dr. Farouk states only that the petitioner "assisted" him in reviewing several journal papers. Dr. Farouk does not identify the specific journals or manuscripts involved. Nor has it been established that reviewing a paper at the request of a former supervisor constitutes qualifying evidence under this criterion.

In response to the director's request for evidence, the petitioner submitted a letter from P. James Viccaro, Editor, Journal of Applied Physics dated March 19, 2003. His letter states: "[The petitioner], with Applied Materials, Inc., Sunnyvale, CA, is a reviewer for the *Journal of Applied Physics*." P. James Viccaro's letter does not indicate the number of manuscripts reviewed by the petitioner, their titles, or the dates of their completion. On appeal, the petitioner presents a letter from Dr. Noah Hershkowitz, Editor-in-Chief, *Plasma Sources Science and Technology*, dated July 3, 2003. In the same manner as P. James Viccaro, Dr. Hershkowitz states that the petitioner "was selected to become a reviewer to judge a manuscript for publication," however, he does not identify the manuscript involved or indicate when the review was completed. The documentation presented here does not establish that the petitioner had completed manuscript reviews for the above journals as of the petition's filing date (June 6, 2002). *See Matter of Katigbak, supra.*

Aside from the issue of when the reviews were completed, it is noted 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 automatically demonstrate that the petitioner has earned sustained national or international acclaim at the very top of his field. Without evidence that sets the petitioner apart from others in his field, such as evidence that he has reviewed an unusually large number of articles, received independent requests from a substantial number of journals, or served in an editorial position for distinguished journals, we cannot conclude that he meets this criterion.

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

Dr. Ashok Das, Manager of the Computer Modeling and Simulation Group in the Core Technologies Division at Applied Materials, Inc., states:

> [The petitioner] joined Applied Materials, Inc. in February 2000... [The petitioner], who works directly under my supervision, is the best expert I am aware of internationally holding such exceptional abilities in plasma, flow, thermal and mechanical aspects.
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> * * *
>
> Since coming to Applied Materials, [the petitioner] has made several extraordinary accomplishments – designing important new products and improving existing products. First, [the petitioner's] modeling efforts helped design the transonic nozzle for shock-wave particle removal. This outstanding accomplishment has led to his filing of a patent application.... [The petitioner] has developed a simple and unique technique that will allow us to remove particles from a wafer in a dry and clean environment without any particle re-disposition that minimizes micro-contamination as necessary in micro-device fabrication.

Dr. Stefanie Harvey, now an Engineering Physicist at the Stanford Linear Acceleration Center, formerly served as the Senior Engineering Manager of the Microcontamination group in the Core Technologies division at Applied Materials, Inc. Dr. Harvey is listed as a co-inventor on the petitioner's patent application entitled "Method and Apparatus for Critical Particle Flow Removal." She states:

> What makes the [petitioner's] accomplishment so important and unique is that it is simple design, and unlike any other existing design, the flow through the nozzle cleans the wafer surface without any damage or re-disposition. Because of its potential for improving the production of semiconductor equipment of the electronics, defense, communications, and other industries, Applied Materials has filed U.S. and international patents for his design. The transonic nozzle is expected to be used both nationally and internationally to reduce micro-contamination in semiconductor equipment.

A petitioner, however, cannot file a petition under this classification based on the expectation that his work may eventually have practical applications. *See Matter of Katigbak, supra.* The record contains documentation showing that Dr. Harvey and the petitioner were co-inventors on patent applications filed with the World Intellectual Property Organization (WIPO) and the U.S. Patent and Trademark Office (USPTO) for the transonic nozzle for shock-wave particle remover. We note, however, that anyone may file a patent application, regardless of whether the invention constitutes a significant contribution. In this case, there is no evidence showing that, as of the petition's filing date, their patent application was approved by the USPTO or WIPO, that the innovation described in the patent application was being utilized by semiconductor manufacturers on a national or international scale, or that the innovation was being hailed among semiconductor manufacturers throughout the industry as a major contribution.

Even if the petitioner were to provide evidence of an approved patent as of the petition's filing date, it would carry little weight in this matter. The granting of a patent documents only that an innovation is original; not every patented invention constitutes a major contribution in one's field. According to statistics released by the USPTO, which are available on its website at *www.uspto.gov*, that office has approved over one hundred thousand patents per year since 1991. In 2001, for example, it received 345,732 applications and granted 183,975 patents. Of far greater relevance than the existence of a patent is the importance to the greater field of the petitioner's patented innovation. Here, the petitioner has provided no substantive evidence showing that his particular innovation is widely praised throughout the semiconductor industry. Assertions to that effect from those who know the petitioner personally carry far less weight than would independent evidence, such as, for example, a trade journal article in *Semiconductor International* devoted entirely to the petitioner's innovation. A press release issued by Applied Materials that was provided on appeal did not single out the petitioner for his contribution, nor did it identify the transonic nozzle for shock-wave particle removal as the key component of the Applied Materials' Enabler™ System.

Dr. Das cites a few examples of instances where the petitioner has contributed to the design and improvement of other Applied Materials products. That the beneficiary played a role in ensuring the successful product development and commercial deployment of these technologies demonstrates only that he performed the job expected of him in his capacity as a process engineer. Beyond showing that these products were commercially successful, the petitioner must also show that beneficiary's individual work was widely acclaimed throughout the industry as a major contribution (rather than only among witnesses selected by the petitioner). An individual with sustained national or international acclaim should be able to produce ample unsolicited materials reflecting that acclaim.

Dr. C. K. Birdsall, Professor Emeritus, Department of Electrical Engineering and Computer Science, University of California at Berkeley, and current leader of its Plasma Theory and Simulation Group, states that he "became aware of [the petitioner's] work while at the IEEE Conference on Plasma Science in June, 1999." Dr. Birdsall notes that he has followed the petitioner's work since attending the petitioner's oral presentation at the IEEE conference. He further states: "[The petitioner's] publications reveal a history of major research accomplishments that indicate he is a true leader in the field." Published work falls under another criterion; to satisfy this criterion, the petitioner must show not only that his work was published, but that it has major significance in the field. Dr. Birdsall cites seven of the petitioner's published articles and offers a summary of the findings presented in those articles. While Dr. Birdsall describes the petitioner's findings as "noteworthy" and "important," his comments do not imply that any of the petitioner's published findings would rise to the level of a "contribution of major significance." It is apparent that any journal article, in order to be accepted for publication, must offer new and useful information to the pool of knowledge. It does not follow that every researcher whose work is accepted for publication has made a major contribution in his particular field. The record contains no evidence showing that the publication of one's work is unusual in the petitioner's field, nor does the record sufficiently demonstrate that independent researchers have heavily cited the petitioner's work in their research. While the petitioner has provided evidence that some of his published articles have garnered a few independent citations, it has not been shown that an aggregate total of approximately fifteen such citations of seven published articles would demonstrate that any of his findings constitute a major contribution. We will further address the petitioner's published works under a separate criterion.

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

Documentation contained in the record indicates that the petitioner has authored articles appearing in journals such as *IEEE Transactions on Plasma Science*, *Plasma Sources Science and Technology*, and the *Journal of Physics D: Applied Physics*. The publication of scholarly articles, however, is not automatic evidence of sustained national or international acclaim; we must also consider the greater research community's reaction to those articles. 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 of a postdoctoral appointment. Among the factors included in this definition were 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." When judging the influence and impact that the petitioner's 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. Frequent citation by independent researchers would demonstrate more widespread interest in, and reliance on, the petitioner's work. If, on the other hand, there are few or no citations of an alien's work, suggesting that that work has gone largely unnoticed by the greater research community, then it is reasonable to question how widely that alien's work is viewed as being nationally or internationally acclaimed.

The record contains approximately fifteen citations of the petitioner's seven published articles. While the citations presented demonstrate some degree of interest in the petitioner's published work, their limited number is not sufficient to elevate the petitioner to a level above almost all other researchers in his field. The petitioner has clearly authored published articles over the past several years, but the weight of this evidence is diminished by the lack of substantial evidence showing that these articles have significantly influenced his field.

> *Evidence that the alien has performed in a leading or critical role for organizations or establishments that have a distinguished reputation.*

In order to establish that he performed in a leading or critical role for an organization or establishment with a distinguished reputation, the petitioner must establish the nature of his role within the entire organization or establishment and the national or international reputation of the organization or establishment. Where an alien has a leading or critical role for a division of a distinguished organization or establishment, the petitioner must establish the reputation of that division independent of the organization as a whole.

The record adequately establishes that the Core Technologies Division at Applied Materials has a distinguished reputation. We cannot ignore, however, that the record contains no evidence showing the extent to which the petitioner has exercised substantial control over personnel or research decisions executed on behalf of his division. We note here that the petitioner's witnesses from Applied Materials all hold higher positions of authority as managers or directors in their respective divisions or research groups. This criterion, like all of the criteria, is intended to separate the petitioner from the majority of his colleagues. Therefore, when determining the petitioner's eligibility, it is entirely appropriate to compare the petitioner's role and responsibilities to those of his witnesses. It is immediately apparent that the importance of their roles and responsibilities far exceeds that of the petitioner. While we accept that the petitioner has contributed to Applied Materials research and development projects, it has not been shown that his role is any more significant than that of other the engineering researchers within his division. For these reasons, we find that the petitioner's evidence falls short of establishing that the petitioner has performed in a leading or critical role for a distinguished organization, or that his involvement has earned him sustained national or international acclaim.

The fundamental nature of this highly restrictive visa classification demands comparison between the petitioner and others in his field. The regulatory criteria describe types of evidence that the petitioner may submit, but it does not follow that every researcher engineer who has published the results of his work or earned the respect of a handful of his colleagues and mentors, is among the small percentage at the very top of the field. While the burden of proof for this visa classification is not an easy one to satisfy, the classification itself is not meant to be easy to obtain; an alien who is not at the top of his or her field will be, by definition, unable to submit adequate evidence to establish such acclaim. This classification is for individuals at the rarefied heights of their respective fields; an alien can be successful, and even win praise from experts in the field, without reaching the top of that field.

The documentation submitted in support of a claim of extraordinary ability must clearly demonstrate that the alien has achieved sustained national or international acclaim, is one of the small percentage who has risen to the very top of the field of endeavor, and that the alien's entry into the United States will substantially benefit prospectively the United States. The petitioner in this case has failed to demonstrate that he meets at least three of the criteria that must be satisfied to establish the sustained national or international acclaim necessary to qualify as an alien of extraordinary ability.

Review of the record does not establish that the petitioner has distinguished himself as a research and development engineer 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.