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**DISTRICT OF COLUMBIA COURT OF APPEALS**

No. 00-AA-1489

BILLY ZHAO ZHEN ZHANG, PETITIONER,

v.

DISTRICT OF COLUMBIA DEPARTMENT OF CONSUMER  
AND REGULATORY AFFAIRS, RESPONDENT.

Petition for Review of a Decision of the District of Columbia  
Department of Consumer and Regulatory Affairs  
(OAD No. 1999-043)

(Argued February 4, 2003)

Decided October 23, 2003)

*Tobias E. Zimmerman*, with whom *Michael L. Converse*, was on the brief for petitioner.

*William J. Earl*, Assistant Corporation Counsel, with whom *Arabella W. Teal*, Interim Corporation Counsel at the time the brief was filed, and *Charles L. Reischel*, Deputy Corporation Counsel at the time the brief was filed, were on the brief for respondent.

Before GLICKMAN and WASHINGTON, *Associate Judges*, and BELSON, *Senior Judge*.

BELSON, *Senior Judge*: Appellant Zhang appeals from a decision of the Board of Registration for Professional Engineers<sup>1</sup> denying his application for licensure without examination. We hold that the Board failed to consider relevant evidence of the petitioner's experience and background and that, accordingly, its findings are not supported by the

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<sup>1</sup> This case is before us after remand. On remand, the Board referred Zhang's application to the Office of Adjudication of the Department of Consumer and Regulatory Affairs (DCRA). Thus, the named respondent on appeal is DCRA, rather than the Board.

record, and its conclusion that petitioner failed to establish that he is a person of established and recognized standing as an engineer is unreliable. Accordingly, we remand for further proceedings.

## I.

Billy Zhao Zhen Zhang is a native of the People's Republic of China. There he earned the equivalent of a Bachelor of Science degree in civil engineering in 1956 from Tongji University, described in testimony as the Chinese equivalent of "MIT or Cal-Tech,"<sup>2</sup> and became a licensed engineer in China in 1961. From 1956 to 1988, Zhang worked at the East China Architectural Design Institute (ECADI) in Shanghai, one of the larger and more important government design bureaus for much of China's history under communism.<sup>3</sup> While he was at ECADI, Zhang rose to the position of Deputy Department Chief Engineer. In that position, he supervised an office of approximately 100 persons working on the design of various projects and was in charge of hundreds of design projects, some of which were highly complex. Zhang was a long time member of the Chinese Civil Engineering Society and eventually attained the status of "Senior Engineer," a title requiring more than twelve years of practice as an engineer as well as recommendation by two senior engineers. He was

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<sup>2</sup> Massachusetts Institute of Technology and California Institute of Technology, respectively.

<sup>3</sup> At the relevant time, all civil engineering and design work in China was performed by ECADI and similar state agencies.

also a member of both the Shanghai Society of Architectural Institute and the Shanghai Society of Science and Technology.

According to un rebutted evidence, Zhang's other achievements in China included many awards and professional honors,<sup>4</sup> authoring – either alone or with others – many technical articles published in journals with broad distribution in China, and presentation of a technical paper to the Society of Architects in Shanghai, as well as other technical papers. He was invited to serve as a member of the professional committee that dealt with the China Cold Formed Steel Code of Standard of Practice. Zhang conducted research with another engineer on the shearing strength of prestressed concrete hollow-core slabs and on the load-carrying capacity of precast concrete “two-way slabs.” In addition, he developed a particular type of prestressed reinforced concrete slab and connectors for joining reinforced concrete hollow core slab wall panels to the superstructure of buildings.<sup>5</sup> Zhang testified without contradiction that the reason he held no patents on these inventions is that China did not have a system for applying for or receiving a patent. Zhang also proffered the testimony of Guohua Greg Chen, the Mayor's Special Assistant for Asian Pacific matters (Mr. Chen did

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<sup>4</sup> Zhang presented un rebutted evidence that he received the Honor Certification for Eminent Service in the Design of Architectural Standards (one of the highest honors granted by the People's Republic of China), a Certificate of Merit from the Cooperative Office of the Design of Architectural Standard of East China, a Prize Certificate for his work in prestressed concrete and reinforced concrete, and a national Prize Certificate for excellent design.

<sup>5</sup> As discussed below, some positions of the ALJ's findings 9 and 10 are at odds with un rebutted evidence referred to in this paragraph.

not testify in his official capacity), that individuals in China could not receive patents for their inventions. In addition, Board Secretary Hershey stated at the 1995 hearing that the Board realized that during the period in question, the authorities in China “didn’t give patents.”

Zhang emigrated to the United States in 1988 for personal reasons and eventually became a citizen of this country.

## II.

Zhang filed an application for a license without examination pursuant to D.C. Code § 47-2886.08 (2)(A)(v)(2001) (formerly § 2-2308), seeking a license to practice engineering in the District of Columbia, on August 18, 1989 (first application). On May 17, 1990, the Board of Registration for Professional Engineers (Board) issued a notice of intent to deny Zhang’s first application, and Zhang made a timely request for a hearing. The Board convened the first hearing on November 21, 1991, at which Zhang appeared *pro se*. On January 26, 1993, Zhang received the Board’s notice of denial. The notice was dated November 19, 1992, but was postmarked January 25, 1993. Because of this delay, Zhang states, he believed that his right of appeal had expired and did not appeal the Board’s denial.

On March 8, 1994, Zhang filed a second application for license without examination

(second application). On October 3, 1994, the Board issued a notice of intent to deny the second application, and Zhang requested a hearing. The Board held its hearing on Zhang's second application on April 20, 1995, where Zhang again appeared *pro se*. On May 30, 1996, the Board issued its notice of denial as to the second application. Zhang filed a timely appeal, No. 96-AA-842, on June 27, 1996.

Zhang's brief on appeal argued strongly that the Board had erred in adding to the statutory requirements for licensure without examination the additional requirement that the applicant's experience and achievements have been in the United States. The Board responded by moving for a limited remand of the record so that it could clarify its rationale for denying Zhang's application. The Board then moved this court to remand the entire case for additional findings and, on September 30, 1998, we granted that motion over Zhang's objection. On remand, the Board referred Zhang's application to the Office of Adjudication of the Department of Consumer and Regulatory Affairs, which assigned the case to an administrative law judge (ALJ).

An administrative law judge held a hearing on November 18, 1999, at which Zhang presented new and substantial evidence in support of his application. On July 20, 2000, the ALJ issued his findings of fact which were, in most respects, similar to the Board's 1996 findings of fact. Absent, however, was language explicitly qualifying its conclusions that petitioner had failed to prove his established and recognized standing as an engineer with

the words “in the United States.”<sup>6</sup>

Moreover, the ALJ’s recommended decision acknowledged this court’s opinion in *Teare v. Committee on Admissions*, 566 A.2d 23 (D.C. 1989) (requirements for licensure and admission to D.C. Bar without examination must be facially neutral and apply with equal force to all individuals regardless of place of origin), and indicated that the principles established in *Teare* were honored because all applicants for a professional engineering license must meet the same requirements regardless of whether they are foreign born or are from this country. The ALJ’s recommended decision also addressed Zhang’s engineering experience in China, but concluded that no evidence was submitted that indicated that Zhang had received the kind of recognition from his peers in the engineering profession required for licensure by eminence. On October 19, 2000, the Board issued its final order, “adopt[ing], approv[ing] and ratify[ing]” the ALJ’s recommended decision, and denying Zhang’s application for a license without examination. Zhang then filed this timely petition for review.

### III.

Zhang contends that the Board’s denial of his application for licensure as an engineer

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<sup>6</sup> Also absent was the previous conclusion that Zhang had failed to establish that he had been in responsible charge of important engineering work of a grade and character satisfactory to the Board for at least five years “in the United States.”

without examination was either (1) premised on an incorrect interpretation of law regarding achievements and experience outside of the United States, or (2) not supported by substantial evidence of record.

Our review of administrative orders is two-fold. First, we review the factual findings of the agency to determine if there is substantial evidence to support them. *Harrison v. Board of Trs. of the Univ. of the District of Columbia*, 758 A.2d 19, 22 (D.C. 2000). If, after examining the record as a whole, we conclude that the agency's findings are supported by substantial evidence, we must accept those findings even though the record could support a contrary finding. *Id.* See also *Kirkpatrick v. District of Columbia Pub. Sch.*, 786 A.2d 586, 592 (D.C. 2001).

Next, we conduct a *de novo* review of an agency's legal conclusions. *Harrison, supra*, 758 A.2d at 22. We generally accord great deference to the agency's interpretation of its own regulations, "so long as that interpretation is reasonable and consistent with the statutory language," *Kirkpatrick, supra*, 786 A.2d at 592, and we leave an agency's decision undisturbed if it flows rationally from findings of fact that are supported by substantial evidence in the record. *Oubre v. District of Columbia Dep't of Employment Servs.*, 630 A.2d 699, 702 (D.C. 1993).

**IV.**

The practice of engineering in the District of Columbia is regulated as a matter of public interest, and only qualified persons are “permitted to engage in the practice of engineering.” D.C. Code § 47-2886.03 (2001). The statutory scheme under which the Board operates is intended to “safeguard life, health, and property, and promote the public welfare.” *Id.* An individual may obtain an engineering license in the District by passing an examination or by proving that he or she has an equivalent license or certification from another jurisdiction. D.C. Code § 47-2886.08 (2)(A)(i) through (iv). Alternatively, an individual may demonstrate that he is sufficiently qualified to be licensed as an engineer in the District by:

Submit[ting] evidence that he is an engineer of *established and recognized standing* in the engineering profession and that he has been lawfully engaged in the practice of engineering for 12 or more years, of which at least 5 years shall have been in *responsible charge of important engineering work* of a grade and character satisfactory to the Board. [Such a] person may be registered under this subparagraph without examination.

D.C. Code § 47-2886.08 (2)(A)(v) (2001). (Emphasis added.)

The principal dispute in this case is whether Zhang demonstrated that he was an engineer of “established and recognized standing.” In *Becker v. District of Columbia Dep’t of Consumer & Regulatory Affairs*, 518 A.2d 93 (D.C. 1986), petitioner Becker had applied

for licensure under subsection (v) as does Zhang. The Board adopted, and this court approved, the use of nine specific factors (the *Becker* factors) as a means of determining an engineer's established and recognized standing.<sup>7</sup> The factors are whether the applicant:

1. is licensed as a professional engineer in any state;
2. is a member of any professional institutes, societies or associations;
3. has been elected to office in technical societies known to be selective regarding membership, or served on any national or international technical committees;
4. served on agency technical committees or review boards;
5. has been invited to present or discuss technical papers before technical societies, or to review or prepare articles for presentation;
6. has published articles in any recognized scientific, technical or trade journals;
7. has patented any inventions;

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<sup>7</sup> The factors were not listed as such in the *Becker* administrative law judge's recommended decision. Rather, the administrative law judge had made findings of fact that Becker was not licensed "as a professional engineer in any state," was a member of three professional societies, had not been elected to office in a technical society, had not served on any national or international committees, had not served on agency technical committees or review boards, had not been invited to present or discuss technical papers, had not reviewed or prepared articles for publication, had not patented any inventions, had not appeared in court as an expert witness, and had not received any awards or professional honors. *Id.* The Board adopted these findings of fact, along with the rest of the administrative law judge's recommended decision, in its final order denying Becker's application for licensure without examination.

8. has appeared in court as an expert witness; and
9. has received any awards or professional honors.

*Becker, supra*, 518 A.2d at 94 n.1. In *Becker*, we held that these factors constituted a “reasonable construction” of the statutory language. We did not, however, determine that they made up an exclusive list of the factors the Board could consider, nor did we indicate that any particular weight should be assigned to any of the factors.<sup>8</sup> *Id.* at 94. The Board now provides a modified form of the *Becker* factors in an information handout given to applicants for an engineering license. The Board also includes the modified factors when it issues notices of intent to deny.<sup>9</sup>

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<sup>8</sup> There was no need to do so since *Becker* had not demonstrated that he met even one of the factors.

<sup>9</sup> The modified factors are:

1. Membership or election to office in those technical societies known to be selective regarding membership qualifications or in national or international technical committees;
2. Selection to serve on agency or departmental technical committees or review boards;
3. Invitations to:
  - a. present or discuss technical papers before technical societies;
  - b. review or prepare articles for publication;
4. Publication of articles in well-recognized scientific, technical or trade journals;

(continued...)

In using the factors as set forth in *Becker* as a framework for evaluating Zhang's application, the Board appears to have applied them narrowly and in such a way as to give substantial weight only to achievements in the United States, while avoiding the express limitation to standing or accomplishments "in the United States" that had rendered its 1996 ruling vulnerable to challenge and led the Board to seek its remand. This is too narrow an interpretation given that, except for the first and seventh factors which we discuss below, the *Becker* factors contain nothing that could be seen as limiting the area of consideration to accomplishments in this country rather than in another.

As to the first factor that the court identified in *Becker* – "licensed as a professional engineer in any state" – we note that in *Becker* the Board was considering the application of a citizen of the United States when it adopted the ALJ's finding that Becker "was not licensed as a professional engineer in any state." *Id.* The Board (like the ALJ before it) was not called upon to consider an application by a person with a professional engineer's license

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<sup>9</sup>(...continued)

5. Ownership of patents on applicant's own inventions;
6. Statements of employers or associates;
7. Court appearances as an expert witness;
8. Receipt of awards or other professional honors.

Notably absent from the modified factors is the first *Becker* factor regarding the applicant's licensure elsewhere.

from a licensing authority outside the United States.

In this case the ALJ and Board in finding of fact no. 7 gave Zhang no credit at all for his long-standing licensure in China. Consideration of an application of a person not duly licensed in a state or territory of the United States, however, must be informed by the other portions of the licensing statute. D.C. Code § 47-2886.08 (2)(A)(i), which is not applicable here, allows an individual who is licensed as a professional engineer “by a proper authority in a state or territory in which the requirements and qualifications for obtaining such a license . . . are reasonably equivalent” to the District’s, to obtain a license in the District without taking an examination.<sup>10</sup> Since any applicant with a state-issued license obtained under

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<sup>10</sup> D.C. Code § 47-2886.08 states in pertinent part:

(2)(A) To register as a professional engineer any person of good character and repute who is a citizen of the United States, at least 18 years of age, and who speaks and writes the English language, if such person:

(i) Holds a license or certificate of registration to engage in the practice of engineering issued to him by proper authority of a state or territory of the United States in which the requirements and qualifications for obtaining such license or certificate of registration are reasonably equivalent in the opinion of the Board to the standards set forth in this part. A person may be registered under this sub-subparagraph without examination;

equally rigorous requirements would be expected to apply for a District professional engineer's license under D.C. Code § 47-2886.08 (2)(A)(i), it follows that the first *Becker* factor calls for considering whether the applicant has a license from an authority whose requirements are not reasonably equivalent to the District's. We see no reason why this type of consideration should be restricted to licenses issued by one of the states rather than a foreign country. *See, e.g., Teare, supra*, 566 A.2d at 28 (requirements for licensure and admission to D.C. Bar without examination must be facially neutral and apply with equal force to all individuals regardless of place of origin).

While it is true, as the Board found, that Zhang is not licensed in the United States, Zhang presented substantial un rebutted evidence that he was licensed as both an engineer and a senior engineer in China. He also presented un rebutted evidence that the Chinese licensing requirements are comparable to those in the United States. Indeed, petitioner's witness, Ulysses I. Montgomery, a licensed engineer with international engineering experience who had worked in the past with Chinese engineers, opined that the Chinese engineering examination "is actually tougher than ours." Although we appreciate the difficulties inherent in evaluating an engineering license obtained in another country, that difficulty alone does not permit the Board simply to ignore evidence of such licensure. Thus, Zhang's licensure in China was entitled to some positive consideration.

The Board's interpretation of the seventh *Becker* factor – whether the applicant has

patented any inventions – fails to take into account the fundamental import of this factor. In the United States, a patent serves as evidence of an applicant’s status as an inventor who has contributed new ideas to the field of engineering rather than simply practicing existing techniques. While it is certainly reasonable to look to the applicant’s inventiveness in considering an application for licensure without examination, ownership of a United States patent is not the only possible proof of such inventiveness.

Zhang presented substantial un rebutted evidence that while in China he had invented both a type of prestressed reinforced concrete hollow core slab and a type of connector for attaching reinforced concrete hollow core slab wall panels to the main structures of large buildings. It is true that Zhang was unable to demonstrate that he held patents on these inventions, but he offered un rebutted testimony that the government of China did not allow individuals to apply for or receive a patent. At the 1995 hearing, Board Secretary Hershey acknowledged that China did not award patents during the period in question. Given China’s system, Zhang’s lack of a patent was not indicative of an absence of the kind of inventiveness the Board considers desirable in an applicant for licensure without examination. Again, with full appreciation for the difficulties of assessing such alternative evidence of inventiveness, we hold that the Board may not simply ignore alternative evidence of an applicant’s inventiveness, when the offer of such alternative evidence is reasonably to be expected from one in the situation in which the applicant found himself at the time of the inventions. At the same time we emphasize that it is the applicant’s obligation to supply the

Board with English translations of relevant foreign language materials that the applicant wishes the Board to consider, and to explain, where necessary, their relevance in the country from which they originate.

These same considerations pertain to the Board's evaluation of other aspects of Zhang's engineering career in China. It is obviously true that political and cultural differences may make the Board's task more difficult. Here again, we emphasize, it is the petitioner's burden to supply the Board with the information it needs to accomplish that task. The Board, on the other hand, is obliged to be open to the receipt of such information and give it the consideration it is fairly due. In this case, Zhang adduced evidence about the significance of his career accomplishments but those accomplishments were not recognized in the findings. Zhang also called witnesses to help put Zhang's accomplishments in perspective, but with little impact.<sup>11</sup>

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<sup>11</sup> Zhang called witnesses Chen and Scissors to place in context Zhang's career as an engineer in China and the high level of his recognition and accomplishments there. During the hearing, the ALJ was somewhat dismissive of this significant testimony, and his reaction tended to curtail it. During the testimony of witness Chen, the ALJ followed up on petitioner's counsel's explanation that he was trying to show Zhang's eminence in the context of the Chinese political structure, by immediately asking Chen if he was an engineer and whether he could speak to the engineering design of buildings designed by Zhang, and subsequently stated that he did not think that Chen could shed much light on Zhang's standing or expertise. During the testimony of Dr. Scissors, the ALJ confessed that he didn't see how Dr. Scissors could help establish eminence, asking "again, have you seen any of the structures Mr. Zhang has built or designed"?

This is illustrated by the Board's application of the remaining *Becker* factors. The Board adopted the ALJ's recommended findings 9 and 10 which failed to take into account substantial and un rebutted evidence that Zhang had: served on national technical committees while in China; been invited to present technical papers before technical societies while in China; been the primary author of technical articles published in Chinese nationwide journals; and received many awards from professional engineering societies or associations while in China.<sup>12</sup> Despite this showing, the ALJ and Board concluded that "No evidence was submitted which indicated that Zhang had received the kind of recognition from his peers in the engineering profession required for licensure by eminence." In effectively confining its consideration of Zhang's professional accomplishments to his activities in the United States, the Board, while not acknowledging it as it had in its previous opinion, essentially construed the statute as requiring that an applicant show established and recognized standing as an engineer in the United States. This was an unreasonable construction and application of the licensing statute.

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<sup>12</sup> The other remaining *Becker* factors 3, 5, 6, and 9, were addressed in findings 9 and 10 of the Board's final order, dated October 19, 2000. As to *Becker* factor 6, it appears that the Board unreasonably narrowed the authorship requirement when it noted that Zhang was not the "sole" contributor to the articles he proffered. Research in many scientific communities is conducted by teams rather than by single individuals. Any article flowing from such research would necessarily list all the team members as contributors in addition to the senior member of the team who would be the primary contributor. See, e.g., *Guidelines for the Conduct of Research in the Intramural Research Programs at NIH*, p. 4, at <http://www.nih.gov/news/irnews/guidelines.htm#anchor128256>, visited July 11, 2003.

“Licensing statutes, while primarily designed to protect the public, should be construed and administered in such a way that capable and deserving applicants, possessing the requisite . . . qualifications, are not denied the right to gain or to continue a livelihood in the practice of their calling.” *Brewster v. Kinlein*, 209 A.2d 788, 789 (D.C. 1965). Nothing in the statute requires that the applicant have established and recognized standing in the United States. Rather, the statute requires recognized standing “in the engineering profession.” D.C. Code § 47-2886.08 (2)(A)(v) (2001). Furthermore, nothing in the public policy underlying the statute points to a legislative intent to restrict applicants for licensure without examination to those who have recognized standing in the United States. Our holding in *Becker* did nothing to change this. In *Becker*, the Board was able to consider only Becker’s experience in the United States because Becker had no professional experience as an engineer outside the United States. Since foreign experience was not an issue in *Becker*, our holding in *Becker* cannot be fairly read to mean that the Board should not consider, to the extent that the applicant enables the Board to do so, an applicant’s professional engineering experience from another country. We hold, therefore, that the Board unreasonably confined its consideration of Zhang’s professional experience to his activities in the United States even though the circumstances permitted it to give consideration to his achievements and accomplishments in China.

By failing to give due consideration to Zhang’s professional experience in China, the Board “ignored the substantial, uncontradicted evidence [in the] record.” *Potomac Elec.*

*Power Co. v. Public Serv. Comm'n of the District of Columbia*, 380 A.2d 126, 144 (D.C. 1977). Since the licensing of engineers is committed to the discretion of the Board, it is not our role to rule whether the Board's determination in Zhang's case would have been different had his professional experience in China been duly considered. See *Spartin v. District of Columbia Dep't of Employment Servs.*, 584 A.2d 564, 572-73 (D.C. 1990) (when agency fails to make required finding, court cannot fill gaps by making own determination from record). We fully recognize that in the end it is the Board that must make the important judgment affecting public safety as to whether an engineer whose experience is primarily or solely in a foreign country is qualified under the statute for licensure as an engineer in this country. We do not suggest through this opinion any view as to what the Board's judgment should be in this case.

## V.

In light of the foregoing discussion, we remand this case to the Board for further proceedings consistent with this opinion. In so doing, however, we direct that the Board not simply justify the prior result, but rather begin the consideration of Zhang's application afresh in light of this decision.

*Remanded.*