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# POLISH-AMERICAN ENGINEERS ASSOCIATION

FOUNDED



IN 1934

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All members and friends of Polish-American Engineers Association are cordially invited to attend our meeting.

**DATE:** Friday, October 26th, 2012

**TIME:** 7:30 p.m.

**PLACE:** Copernicus Center  
Kings Hall  
5216 W. Lawrence Avenue  
Chicago, Illinois

*This month we chose to feature two discrete speakers representing two divergent topics. First Speaker will provide a presentation in mechanical engineering while the second speaker will provide an overview of patent applications and protection of Intellectual property.*

**SPEAKER:** Zbigniew Kubala, MS, PhD  
Research and Development Manager at Deublin Company

**TOPIC:** Applications of Rotary Unions

**SPEAKER:** Steven Behnken, B.S. ChE, J.D., registered patent attorney  
SENIOR ANALYST/ANALYST  
Cardinal Intellectual Property

**TOPIC:** Patents in the New Millennium - the Basics and Beyond

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## Professional History

**Dr. Zbigniew Kubala** graduated from Politechnika Wroclawska in 1974 with M.S in Mechanical Engineering with the emphasis on Machine Tools and Manufacturing Technology. Continued working at Politechnika Wroclawska and in 1978 received PhD in Mechanical Engineering with emphasis on theoretical aspects of abrasive machining process. Continued teaching and research activities until 1985. Between 1986 -1989 worked as Visiting Scholar at the University of Missouri conducting research on High Pressure Water Jet Technology sponsored by General Motors and US Department of Energy. In 1989 Dr. Kubala was appointed as Research and Development Manager at Deublin Company being responsible for development of new product for various markets Worldwide. Provided number of innovative solutions of sealing problems at automotive, machine tool, paper, printing, plastic, rubber, corrugating, steel, semi conductor, petroleum and other industries. Holds 7 US Patents.

## **Abstract for Presentation**

Deublin Company was established in 1945 in Northbrook Illinois as small privately owned manufacturer of Rotary Unions that are used by various industries. Rotary Unions provide connection between stationary and rotating part of the machine and allow transfer of liquid or gas at high pressure and high revolution speeds. This seemingly simple products are used by large variety of industries on endless types of machines. Currently Deublin Co. is an undisputed leader on its market with facilities in 17 countries covers the entire World market. Thousands of different models have been developed. In 1993 Company moved its Headquarters to the newly build facility in Waukegan IL. Company remains privately owned by the family of original founder. Presentation in Power-Point format shows Deublin Company, its people, facilities, products and markets.



## **Professional History**

**Steven Behnken** is patent attorney with BS Degree in Chemical Engineering from Purdue University obtained in 1998. He has five years of experience in patent prosecution and searching and more than five years of engineering experience in refineries and chemical plants. His academic qualifications include J.D. - DePaul University College of Law, 2006

### BAR ADMISSIONS

U.S. Patent and Trademark Office, Reg. No. 62,451  
U.S. District Court for the Northern District of Illinois, 2007  
State of Illinois, 2006

### PUBLICATIONS

*Removing the Mental Obstacles from Pro Bono Practice*, DCBA  
BRIEF, May 2011, p. 36-38.

*Sale of a Business: The Forgotten Intangible Assets*, DCBA  
BRIEF, May 2010, p. 28-32.

*Judicially Imposed Limitations on Business Method Patents*, Intellectual  
Property Newsletter (Ill. State Bar Ass'n.), Vol. 48, No. 4, May 2009, p. 1-4.

*Transfer of Interests in Copyrights*, DCBA BRIEF, Feb. 2009, p. 12-16.

## **Abstract for Presentation**

This presentation will focus on the fundamentals of filing a patent application. Specifically, Steve will be discussing the types of patent applications and the protection offered by each, the length of patent protection, and the costs associated with filing and prosecuting a patent application to issue. Steve will also discuss some of the many pitfalls frequently encountered by inventors and the changes to the patent laws that are taking effect in March of 2013.

## Administration Updates

September meeting was highlighted by distribution of three **2012 Ralph Modjeski Scholarships**.



Three individuals were awarded:

- **Tom Golak**  
Senior at Illinois Institute of Technology  
Biomedical Engineering
- **Nicole Rusek**  
Senior at University of Wisconsin Madison  
Energy Engineering
- **Daniel Milewski**  
Junior at Illinois Institute of Technology  
Mechanical and Aerospace Engineering

Gift from the **Heart Foundation in cooperation with Polish Museum of America** is organizing a series of events during the week of October 22<sup>nd</sup>. Calendar of activities can be found at [www.polishmuseumofamerica.org](http://www.polishmuseumofamerica.org) or [www.darserca.org](http://www.darserca.org) and it was also placed on our page. Events of special interest will take place on October 25<sup>th</sup> and 27<sup>th</sup>. At this point we would like to recognize two members of our organization Messieurs **Piotr Kubala and Andrzej Pawlowski** for their efforts to promote activities of these organization and success.

**Nominating Committee** Consisting of Danuta Szymulanska, Ewa Berak, Joanna Jacobs and Mirek Noyszewski will provide a slate of candidates for the next two year term. Elections will be held in December 2012. New administration will assume their responsibilities in January 2013.

**Audit Committee** headed by Mr. Stanley Witczak will review our financial performance and report during the January 2013 meeting.

Three friends of PAEA: **Professor Wieslaw Binienda, and Slawa and George Swiderski** (December 2011 presentation) were honored by Polish American Congress on October 19th. Our organization supported this event.

Please reserve weekend of December 8-9 for our **Christmas Party**. Mrs. Grazyna Czystczon and Mr. Rene Pietrzyk will provide more details during the October 28th monthly meeting.

**Polonia Night** with Polish American Engineers Association & Polish American Chamber of Commerce **Chopin Theatre** is organizing a special event “**Pirates of Penzaence**” on Friday November 30th. This will be an event dedicated to PAEA members and friends.



**\$40 per person** includes complimentary reception and the play “The Pirates of Penzaence”.

Cash bar.

Complimentary parking is available one block east at Holy Trinity Church.

Following agenda was developed.

- 1) Cocktails/food at 6:30PM
- 2) Show at 7:30PM
- 3) After show meeting with artists 9:00PM

Please **contact Michael Niedzinski** at 773-415-1818 or [michael.niedzinski@constellium.com](mailto:michael.niedzinski@constellium.com) if you plan to participate.

## Huey P. Long Bridge – National Historic Civil Engineering Landmark



On September 28, 2012 the Huey P. Long Bridges has been designated a National Historic Civil Engineering Landmark. This honor places this bridge in the company of Eiffel Tower, the Panama Canal, the Hoover Dam and the US Capitol Building. When it was completed in 1935 it was the first railroad highway bridge to cross the Mississippi River in Louisiana. It was the longest high-level, double truss railroad bridge in the world. Bridge carries also a narrow, 18 ft. wide, two-lane roadway bracketed off each side of the trough-truss structure. The total length of the bridge is 22,996 feet between the railroad abutments. The navigational clearance is 135 feet above the high water river stage of +18 feet, to

clear ocean going vessels. It's an example of pioneering engineering. Prior to the bridge ferries handled all trans river rail commerce. With the development of highway traffic and resulted increase in ferry traffic the need for

improved crossing became very important. Port of New Orleans is considered one of the busiest in the world. It handles shipping lines reaching ports in Europe, South America and Asia. Additionally, the Mississippi barge lines traffic carries large tonnages for trans shipment.

Due to difficult soil conditions in the delta of Mississippi, low lands, navigational clearances and strong river currents for a very long time, the best engineers in the country were unable to build a bridge in New Orleans. In 1930 Ralph Modjeski was engaged to prepare plans and specifications for a bridge to satisfy requirements of the Chief of Engineers of the United States Army. Bids were opened in 1931 and in December of 1932 construction started. Designing bridge piers Modjeski consulted with Karl Terzaghi, known for his outstanding foundations expertise. On the completion of the bridge, 15 December 1935, grateful New Orleans Morning Tribune called Ralph Modjeski the Greatest Bridge Builder in History of the Country. The Span was called Marvel of Engineering Skill and Artistic Beauty. Since completion it has been estimated that the bridge carried 100,000 passenger trains and over 30 million freight cars. Bridge carries 34,000 vehicles daily.

Lately, mainly due to it's narrow roadway the bridge was classified as functionally obsolete. After an extensive study the Louisiana Department of Transportation decided to widen the existing bridge roadways to 43 feet each. New roadways will provide three 11 feet wide traffic lanes and two sidewalks. Two new trusses have been added forming a three barrel structure. The existing two trusses will remain essentially undisturbed except for the connection of sway frames and cross-bracing between the new and old trusses. Major constrain was that the vehicular traffic on the bridge had to be maintained with no interruption during the entire construction period. The most amazing is the fact that even though the dead load of the bridge is more then double of its original weight, the structure will be carried by the same caisson piers with no measures necessary to increase the carrying capacity of the Modjeski designed foundations.

**P.A.E.A. MEMBERSHIP DUES.** If you are late with your dues please remember to send us your check. Dues are \$50 per year, senior citizens and students \$25 per year. Questions? 2012 membership cards will be provided to all those who paid their dues. You may send an email to: [paea.info@gmail.com](mailto:paea.info@gmail.com)

**[www.polishengineers.org](http://www.polishengineers.org)**