



Contact

Publication of the Cleveland Section of the Institute of Electrical and Electronics Engineers.

IEEE Cleveland Section Members: The Pleasure of Your Company Is Requested!

Friday, May 31, 6:30-11:00 pm

The IEEE Spring Banquet at the Shafran Planetarium

By Matt Barratt

Come join us on Friday May 31, 2002 from 6:30 to 11:00 for an evening at the Shafran Planetarium at the Cleveland Museum of Natural history, where we will enjoy museum facilities including a Planetarium show. We have access to the first floor of the facility (with the exception of the Gallery of Gems & Jewels). A catered dinner of "heavy hors d'oeuvres" will be provided, including kid-friendly items. Parking is available in the museum lot on Wade Park Oval. The fee for the event is \$18 for members and their guests, \$9 for student members, and \$5 for children under 18.

Please reply to Matt Barratt at (440) 439-7300, or via e-mail to mbarratt@ieee.org. Watch the section web site at <http://ewh.ieee.org/r2/cleveland> for additional information.

What: IEEE Cleveland Section Spring Banquet

When: Fri., May 31, 6:30-11:00 p.m.

Where: Shafran Planetarium Cleveland Museum of Natural History, University Circle

Cost: \$18.00 members/guests, \$9.00 student members and \$5.00 for children under 18

Directions to the Museum:

From the east or west:

Take Interstate 90 and Rt. 2 (Shoreway); exit off Shoreway at Martin Luther King, Jr., Drive (MLK) and University Circle Area exit. Travel south on MLK to the second stop light at East 105th St. (approximately two miles). At this intersection, you are directly behind The Cleveland Museum of Natural History property. Continue through the intersection on MLK. Immediately on the left, you will pass the Museum's loading dock entrance and then a statue of Slovakian General Milan R. Štefánik, located at the entrance to Jephtha Drive. Turn left onto Jephtha Drive, just beyond the statue, and drive up to the top of the hill. At the stop sign, turn left. The museum parking lot is on your left.

From the south:

Travel north on Interstate 71 or 77 to Interstate 90 East (Shoreway). Exit at Martin Luther King, Jr., Drive and proceed as above.

From the southeast:

Interstate 480 West, to Interstate 77 North, to Interstate 90 East (Shoreway). Exit at Martin Luther King, Jr., Drive and proceed as above.

Or take Interstate 271 north to

Interstate 90 west (Shoreway). Exit at Martin Luther King, Jr., Drive and proceed as above.

Or take Interstate 271 north to Cedar Road exit; go west on Cedar Road (right turn). Proceed west on Cedar Road all the way down Cedar Hill (3 lanes), under the Rapid Transit overpass. Turn right at the first traffic light (East Boulevard/Martin Luther King, Jr., Drive). Turn right again at Euclid Avenue

(second light) and keep to the inside lane for an immediate left turn onto East Boulevard, in front of Severance Hall. From East Boulevard, turn left at the first street, Wade Oval Drive, just past the Cleveland Museum of Art near the Cleveland Botanical Garden parking area. Pass the Museum of Art entrance, located to your left, and go around the Oval to The Cleveland Museum of Natural History.

Cleveland Engineering Society Presents the 57th Annual Cleveland World Trade Conference & Exhibition

The Cleveland Engineering Society will partner with the World Trade Center Cleveland to promote the 57th Annual Cleveland World Trade Conference and Exhibition, June 25-27. The conference is being held in conjunction with the 39,000 member Instrumentation Systems and Automation Society (ISA), to create a unique forum for professional and technical exchange and a dynamic site for international business opportunity.

For more information about the conference, please check the World Trade Center Cleveland Web site at www.wtccleveland.org or contact Jennifer Kudla at (216) 592-2461 or jkudla@clevegrowth.com.

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IEEE Cleveland Section CHAIRMAN'S COLUMN

by Ray Heintel

We've gotten off to a slow start this year but we are trying to catch up. We are improving our email notification system. Recent changes in the ISP environment had upset our email notification, but we should now have it back on line. In the Cleveland Section, we now have almost 2600 members compared to about 2000 two years ago. Even though we have almost 2600 members in the Cleveland Section, under two dozen plan and prepare all of the events, If you would like to help out, please call me or stop in at one of the Executive Committee (ExCom) meetings. We would love to have your help to improve our events and sessions.

Several years ago, it was decided to switch to email as our primary method of communication. This saves the Section a considerable amount of money each year. Fortunately, since that time, the number of email addresses we have in our database has risen to over 1700, while two years ago we had only 1200. Although this is an improvement, we are still possibly missing 900 members. To compensate for this, twice a year we mail out the "Contact," this issue and one in the fall. Please check your information at IEEE National and update it for us.

The ExCom will meet through the summer this year. We hope this will provide better continuity for our fall events and meetings. We are now publishing the ExCom meeting minutes on the web site.

We have our spring social planned for the new Shafran Planetarium at the Natural History Museum. This is quite an undertaking for us; we hope you will attend. Please check for details in this issue. It should be a great time. Register now so we can plan for enough food. Looking forward to seeing you there!

A Little History

Spring Meeting at the Shafran Planetarium

By Matt Barratt

The Shafran Planetarium is the newest addition to the Cleveland Museum of Natural History. This is one of the best equipped and most compelling facilities of its size in the world. As visitors enter the planetarium, they will find the Skymaster ZKP3/S projector system, built by the internationally famous Carl Zeiss Planetaria in Jena, Germany. The projector displays 5,000- plus stars and is the first system of its kind in the world.

In addition, the theater has an "all sky" video system, which projects digital video imagery, and a digital sound system. In the Museum's tradition of custom-tailored live programs, planetarium shows are presented by a staff astronomer, rather than running prerecorded shows. The planetarium's architectural design is unique as well. The facility looks like and functions as an astronomical instrument. The 60-foot- tall, cone-shaped structure has a chamfered top that slopes upward at 41 1/2 degrees toward Polaris, the North Star. Sighting markers at the arrival plaza will assist visitors in locating the star. In addition to seeing the North Star on clear nights, visitors will be fascinated with the overall exterior of the planetarium. It will shine and sparkle with "stars," thanks to fiber optic lights embedded in the copper-colored titanium-coated stainless-steel plates covering the structure's exterior.

Of course, the museum's permanent collections and exhibits must not

be overlooked. These include the Reinberger Hall of Earth & Planetary Exploration, the Sears Hall of Human Ecology, and the Kirtland Hall of Pre-historic Life. The Reinberger Hall is one of the first permanent exhibitions in a natural history museum to integrate the sciences of geology and astronomy since its official opening on November 1, 1997. Visitors to the multi-sensory, 8,700 square-foot exhibit hall are able to "ride" over planets in the solar system, feel the rumbling of an earthquake, walk through a simulated underground cave and touch samples of volcanic rock. The collections displayed in the Sears and Kirtland Halls contain artifacts and environmental samples from sites throughout Ohio and the world.

The Cleveland Museum of Natural History has been a northeastern Ohio institution since the 1830s, when a two-room wooden structure on Cleveland's Public Square served as a meeting place for a group of 26 young men interested in the natural sciences. Every corner of "The Ark," as it was called, was filled with mounted birds and mammals -- Cleveland's first natural history collection. After its incorporation in 1920, the Museum established the area's first metropolitan park nature trails, the first trailside nature interpretive center and the Holden Arboretum. Today, the natural science disciplines represented at the Museum include archaeology, astronomy, botany, cultural anthropology, invertebrate paleontology, invertebrate zoology, mineralogy, paleobotany, physical anthropology, vertebrate paleontology and vertebrate zoology.

Thanks from Your Editors

The "Contact" has come to the end of another great season. Thanks a million to all who participated, either by writing articles, volunteering their time to chair societies or attend meetings or who contributed in a myriad of ways to our IEEE Section.

Give some thought to the upcoming events in the Autumn, 2002. Our next edition of the "Contact" is scheduled for September publication. Deadline for submission of articles is August 20th. Just e-mail the editors at mgreene828@aol.com or jgreene327@aol.com. We look forward to hearing from all the members in just two months' time! Have a wonderful summer, everyone!



What Does "OR" Mean to You?

By Michael Garvey

Kustom Signals owns a patent for a traffic monitoring radar device. Among other features, it monitors the fastest and the strongest return signals. That is, it monitors the frequency to determine which vehicle is traveling fastest; furthermore, it monitors signal strength to determine which vehicle is returning the best signal.

One of the patent claims specifies: "means under operator control for selecting either a greatest magnitude or highest frequency search, whereby either strongest signal or fastest signal target identification is provided."

Applied Concepts introduced a similar device. The Applied Concepts device analyzed both the strongest and fastest signals. Kustom Signals sued for patent infringement, and the court had to decide the meaning of the word "or."

Does it mean "A or B or both" or does it mean "A or B, but not both?" Before you read the court's answer, think about what your answer would be. Incidentally, the outcomes of most patent infringement suits are determined by the meaning of a single word or phrase.

Several canons of claim construction are used to determine what the words in a patent claim mean. First, a patentee can be his own lexicographer. That is, the person drafting the application, can define what the words mean. The drafter has great latitude in defining the terms, but cannot define them to be contrary to ordinary meaning. For example, the word "black" might be defined to include certain shades of grey, but should not be defined to include white.

The definition of the term must be fairly explicit. If the term is not defined, it is interpreted to have "ordinary meaning to one skilled in the art."

So, to understand terms in a claim, we first look to the patent itself. Then we look to other parts of the patent's "file history," including prior art cited and arguments made in response to rejections. If the meaning cannot be determined from these, outside sources are consulted. A dictionary is often the first source. Others include technical literature and testimony from "experts."

Kustom Signals argued that "or" used as a logical operator, for example in an OR gate, means "A or B or both" and, therefore, that is what it means in the patent. Applied Concepts argued that in ordinary usage, "or" indicates a choice and, therefore, means "A or B, but not both."

The court noted that the Kustom Signals patent described a switch allowing a user to select between signal frequency and signal strength. Nothing in the patent described an operating mode in which both the fastest and strongest signals were analyzed. Therefore, consistent with ordinary usage, the term "or" means "A or B, but not both."

Keep in mind that, in another patent, in different circumstances, the meaning of "or" might be different. So, in patents, as in all of language and all of life, even the simplest concepts can be subject to different interpretations.

Michael Garvey is a patent attorney with Pearne & Gordon LLP.

May Meeting for NEO STC Fri., May 17, in Hudson

The Northeast Ohio Chapter STC announces the Competitions and Chapter Awards Banquet (preceded by optional CIC SIG meeting).

It's been a great year for the NEO STC, so join us as we recognize the winners of our 2001-02 Technical Publications and Online Communication Competitions, including Best of Show. We'll also review our accomplishments this year and present the following chapter awards: Distinguished Chapter Service, Committee of the Year and Volunteer of the Year. Speakers: TBA.

Note: At 5:00 p.m., the NEO Consulting and Independent Contracting Special Interest Group (CIC SIG) will meet at Chaser's Lounge in the Holiday Inn. For more information, contact Barb Philbrick at caslon@alltel.net.

RSVP by May 10, 2002, to Stephanie Webster at swebster@ppipubs.com (preferred method), or 440-498-9254.

When: Friday, May 17, 2002

Where: Hudson Holiday Inn,
240 Hines Hill Rd. (Rt. 8 and Ohio Turnpike exit 180)
Hudson, OH (330-653-9191)

Directions: The Holiday Inn is on the west side of State Route 8, north of the Ohio Turnpike (I-80).

Time: 5:00 p.m. CIC SIG meeting (optional)
6:00 p.m. Registration and networking
6:30 p.m. Dinner
7:15 p.m. Program

Cost: \$15.00 members, \$18.00
non-members, and \$13.00 students

Menu: Chicken Cordon Bleu or Cheese Tortellini (please specify when you RSVP).

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◆ Webmaster
◆ Website: <http://www.ewh.ieee.org/r2/cleveland/>
◆ News Group Mgr. Richard Bloss 216-464-0405
◆ FAX 216-464-0490
◆ e-mail: aa974@cleveland.freenet.edu



Cleveland Section

Editor:
M. Greene

Art Director:
Jeff Greene

Advertising Manager:
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The "Contact"
is published
eight times per year:
September, October,
November, January,
February, March,
April and May.
The deadline for
electronic Newsletter
articles
is the 20th of the
previous month.