

IEEE IEL Introduction

Národní technická knihovna

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EBSCO Information Services



About the IEEE

- Největší světová technická asociace s více než 400 000 členy po celém světě, 500 + v České republice.
- ▣ Základní aktivity
 - Členství
 - Vydavatelství
 - Sborníky konferencí
 - Standardy / normy

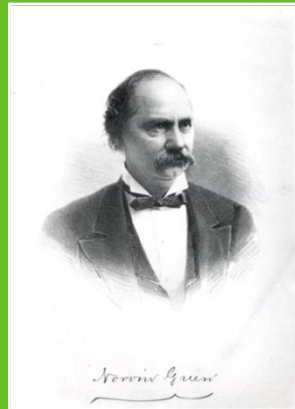


IEEE's Mission

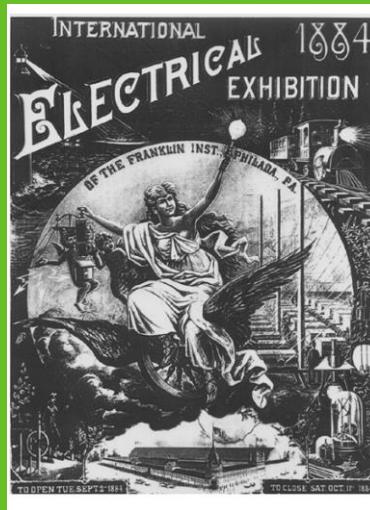
To foster technological innovation and excellence for the benefit of humanity

1884: The American Institute of Electrical Engineers is founded

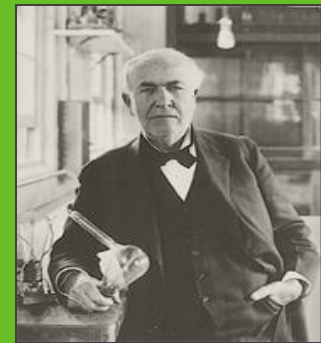
A small group of individuals met in New York and founded the AIEE to advance the new field and represent the US at the 1884 International Electrical Exhibition in Philadelphia.



Norvin Green,
President
of Western Union
Telegraph and first
president of the AIEE



Program of the 1884
International Electrical
Exhibition, Franklin
Institute, Philadelphia



Thomas Edison, one
of the founders of the
AIEE

1912: The Institute of Radio Engineers is founded

Radio, a new electrical technology, arose in the first decade of the twentieth century. With the new industry came a new society, IRE, modeled on the AIEE, but devoted to radio, and later increasingly to electronics.



1901
Guglielmo Marconi and George Kemp with equipment used in transatlantic wireless telegraphy



1912
Radio telegraph operators' communications with the sinking Titanic demonstrated the power of radio



1922
Triode vacuum tube inventor **Lee de Forest** with a radio

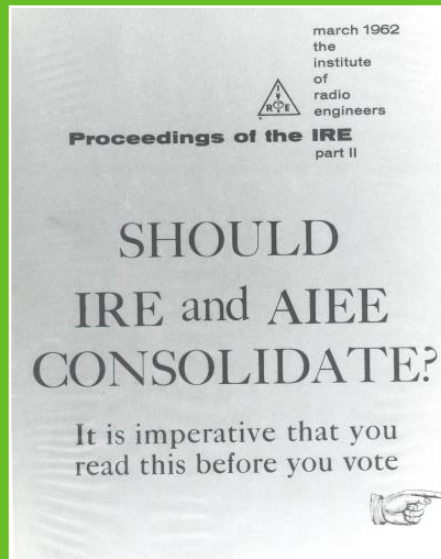
AIEE + IRE = IEEE

The idea that there should be one organization for all electrical engineers was an old one, and became more powerful as the profession expanded beyond its separate roots in power and radio. In 1962, the boards and memberships of the two institutes agreed to merge. On January 1, 1963, the Institute of Electrical and Electronic Engineers was born with 150,000 members.

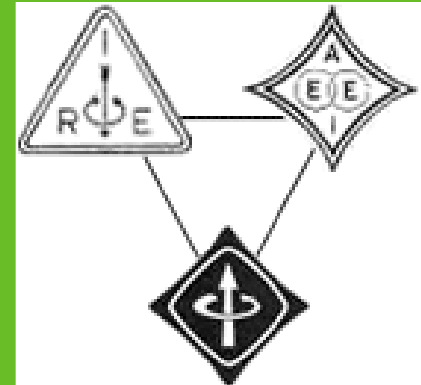


1962

Symposium on the proposed merger, IRE National Convention

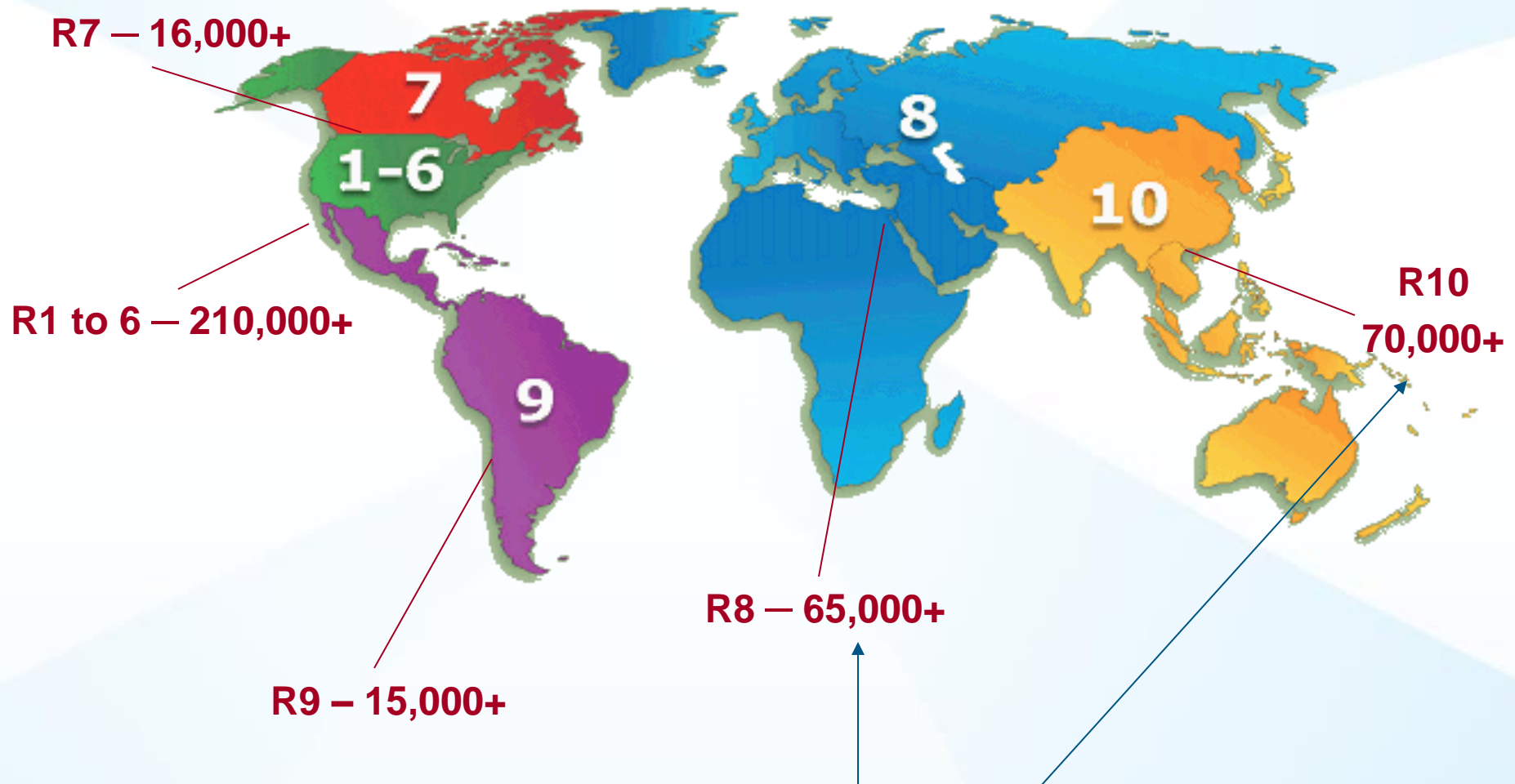


Special merger issue of the
Proceedings of the IRE



The badge of the new IEEE
combined the right hand rule
from the IRE with the kite from
the AIEE

IEEE: An International Community



Reflecting the global nature of IEEE, R8 and R10 are now the two largest IEEE Regions

IEEE covers all areas of technology

More than just electrical engineering & computer science

OPTICS **RENEWABLE ENERGY** **PHOTONICS**
SEMICONDUCTORS **SMART GRID**
IMAGING **INFORMATION TECHNOLOGY**
COMMUNICATIONS **AEROSPACE** **CIRCUITS**
BIOMEDICAL ENGINEERING **ELECTRONICS**
LTE WIRELESS BROADBAND **NANOTECHNOLOGY**
OIL & GAS **CLOUD COMPUTING**
RF **CYBER SECURITY** **MEDICAL DEVICES**

IEEE v NTK

- More than 3,6 million full text documents
- 170 IEEE journals & magazines
- 1200+ annual IEEE conferences + 43 VDE conferences
- More than 2,500 IEEE standards (active, archived, redlines) + IEEE Standard Dictionary
- 20 IET conferences, 26 IET journals & magazines
- **NEW! Bell Labs Technical Journal (BLTJ) back to 1922**
- Inspec index records for all articles
- Backfile to 1988, select legacy data back to 1872

IEEE quality makes an impact

Thomson Reuters Journal Citation Reports® by Impact Factor

IEEE publishes:

19 of the top 20 journals in Electrical and Electronic Engineering

18 of the top 20 journals in Telecommunications

7 of the top 10 journals in Automation & Control Systems

6 of the top 10 journals in Computer Science, Hardware & Architecture

4 of the top 5 journals in Cybernetics

3 of the top 5 journals in Artificial Intelligence

2 of the top 5 journals in Robotics

The Thomson Reuters Journal Citation Reports presents quantifiable statistical data that provides a systematic, objective way to evaluate the world's leading journals.

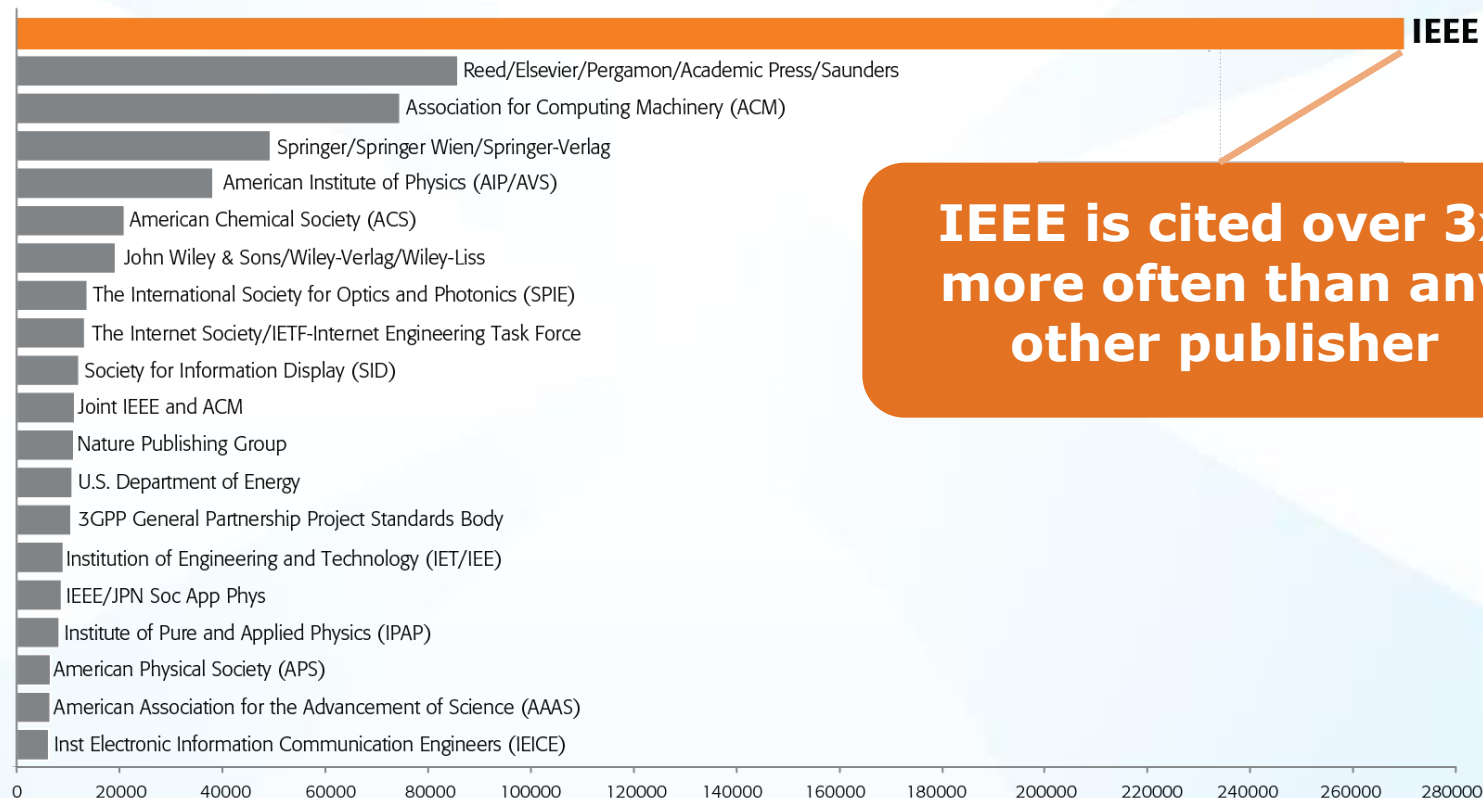
Based on the 2013 study released June 2014

More info: www.ieee.org/citations



IEEE Leads US Patent Citations

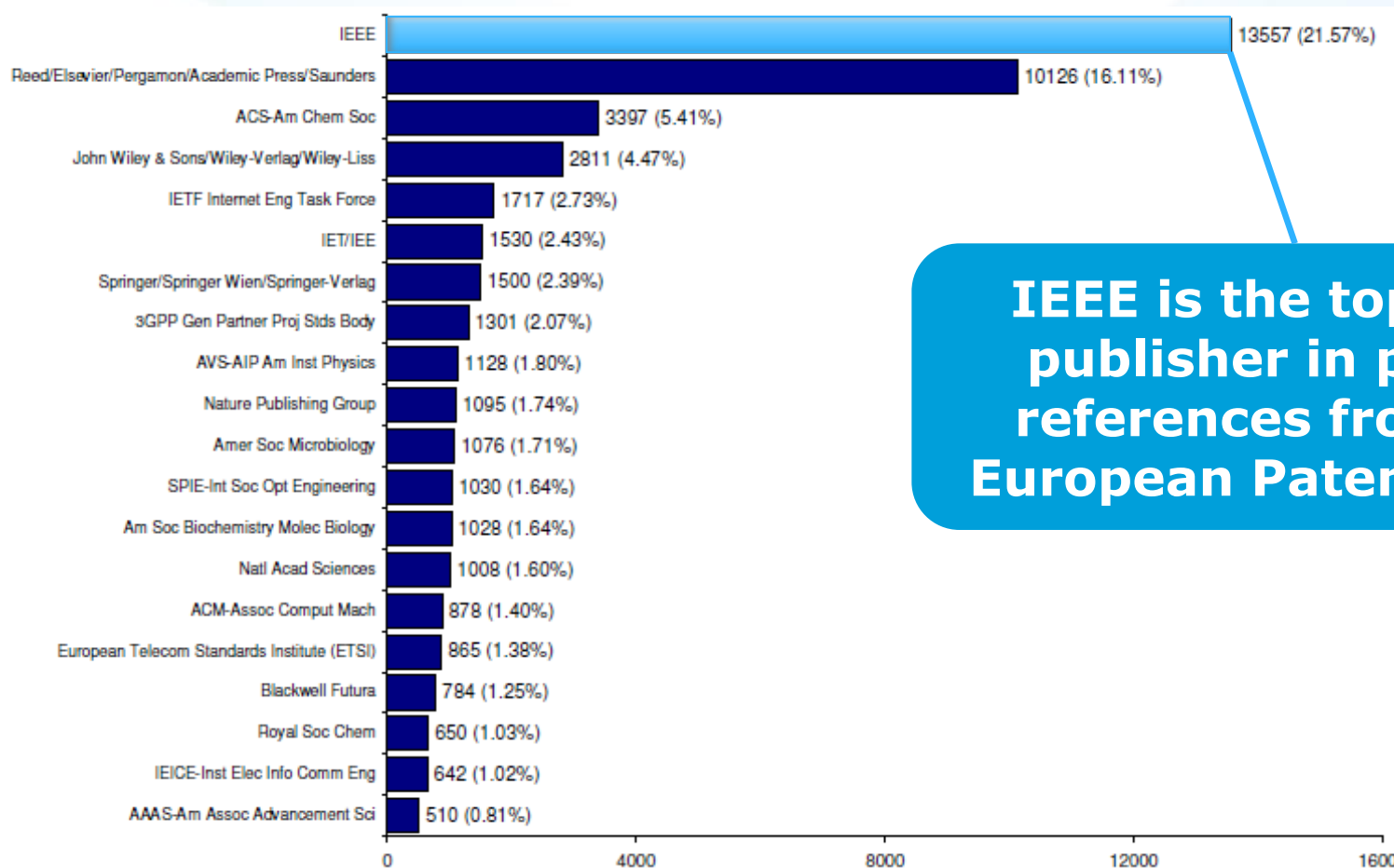
Top 20 Publishers Referenced Most Frequently by Top 25 Patenting Organizations



Source: 1790 Analytics LLC 2013. Based on number of references to papers/standards/conferences from 1997-2012

IEEE Leads European Patent Citations

Top 20 Publishers Referenced Most Frequently in EPO Patents by Top 25 Patenting Organizations

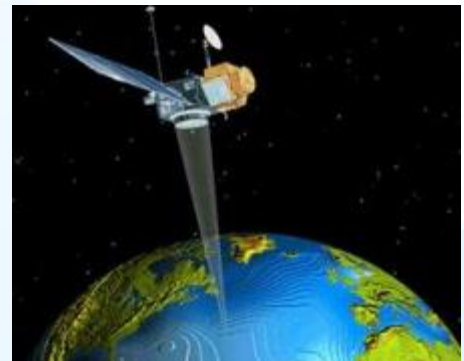


IEEE is the top cited publisher in patent references from the European Patent Office

Source: 1790 Analytics LLC 2012, Science References from 1997-2011

New IEEE journals in 2014

- IEEE/CAA Journal of Automatica Sinica
- IEEE Cloud Computing
- IEEE Transactions on Computational Social Systems
- IEEE Transactions on Control of Network Systems
- IEEE Electrification Magazine
- IEEE Internet of Things Journal
- IEEE Transactions on Network Science and Engineering
- IEEE Power Electronics Magazine



For a complete title listing, to go: <http://ieeexplore.ieee.org/xpl/opacjrn.jsp>

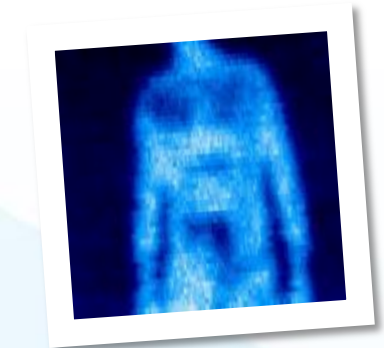
All included in an IEL subscription

New IEEE journals for 2015

- IEEE Transactions on Big Data
- IEEE Transactions on Cognitive Communications and Networking
- IEEE Transactions on Computational Imaging
- IEEE Transactions on Molecular, Biological, and Multi-Scale Communications
- IEEE Transactions on Multi-Scale Computing Systems
- IEEE Transactions on Signal and Information Processing over Networks
- IEEE Systems, Man, and Cybernetics Magazine
- IEEE Transactions on Transportation Electrification

For a complete title listing, to go: <http://ieeexplore.ieee.org/xpl/opacjrn.jsp>

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Děkuji za pozornost!

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