



Inventors News

We are on the web: www.inventors.asn.au

Inventors Association of Australia (SA) Inc Newsletter

July 2009 (NON-MEMBER)

ANNUAL GENERAL MEETING

State Association House
73 Wakefield Street
Adelaide

Thursday 16th July

DOORS OPEN at 7.00pm
MEETING STARTS at 7.30pm

COMMITTEE ELECTION

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GUEST SPEAKER

Chris Hayward
of IP Australia

TOPIC:

How the introduction of the internet has affected IP Australia

SUPPER and NETWORKING
approximately 8.30 – 9.00

Inventors Presentations
and other business

10.00pm CLOSE

Presidents Comments

Once again it is time for the election of officers and committee for this association. This month's meeting is the AGM. For this Inventors Association in South Australia to continue it is vital that we have enthusiastic members come forward to take up the roles of the executive and committee.

Some of the executive have announced that they will not be standing for election this year. We have had some very interesting and informative meetings over the last year and it would be great for these to continue but it will not without an active executive and committee.

Many inventors have been assisted by our association with many very successful products going to the market.

Remember to be able to vote at the meeting you must be a financial member.

Eric Rodda, President

QUOTE OF THE MONTH

“Imagination is more important than knowledge. For while knowledge defines all we currently know and understand, imagination points to all we might yet discover and create.”

Albert Einstein

Speaker Review

June 18th.

Chris Hayward was to have been our Guest Speaker last month, but was unable to attend due to sickness. Chris was to have spoken on how the introduction of the internet has affected IP Australia. He will, however, be delivering this talk at the July meeting.

In Chris' absence, Darrell Mulberry spoke for a few minutes on the *Double Helix Science Club*, an organisation devoted to the promotion of interest in science by young Australians.

The Double Helix Science club, a section of the CSIRO is for children of ages 7 to 14 inclusive. Although there is no actual exclusion of any interested person.

Organised events range from a visit to a chocolate maker, to a four day visit to Woomera rocket range.

Main-stream events such as "hands on chemistry" are held at the EDC {Education Centre} Milner St. Hindmarsh, while many educative visits are held at suitable venues such as the Playford ETSA museum, various sites of Adelaide University and Le Fevre School. In every two month period, there are at least ten events, some of which are repeated two or three times on the same day to accommodate the large numbers of eager children.

Some examples of successes resulting from this out-of-school experience are of past members attaining positions in the science world, such as: leading a research team in prostate cancer; heading a team in nano research in a mining company; and others attending Astronaut college.

The Adelaide branch has more members than the rest of Australian states put together. This success is entirely due to the dedication and enthusiasm of the organiser, Rona Sakko.

Rona's knack of enthusing people of all ages ensures the children learn something at every visit. A bi-monthly glossy magazine, posted from the CSIRO headquarters is included in the annual fee. Find out more at...

www.csiro.au/events/SAHelix.html

Ancient plumbing

History

Standardized earthenware plumbing pipes with broad flanges making use of asphalt for preventing leakages appeared in the urban settlements of the Indus Valley Civilization by 2700 B.C. Plumbing originated during the ancient civilizations such as the Greek, Roman, Persian, Indian, and Chinese civilizations as they developed public baths and needed to provide potable water, and drainage of wastes. Improvement in plumbing systems was very slow, with virtually no progress made from the time of the Roman system of aqueducts and lead pipes until the 19th century. Eventually the development of separate, underground water and sewage systems eliminated open sewage ditches and cesspools.

Materials

Water systems of ancient times relied on gravity for the supply of water, using pipes or channels usually made of clay, lead, bamboo or stone. Present-day water-supply systems use a network of high-pressure pumps, and pipes are now made of copper, brass, plastic, or other nontoxic material. Present-day drain and vent lines are made of plastic, steel, cast-iron, and lead. Lead is not used in modern water-supply piping due to its toxicity.

<http://en.wikipedia.org/wiki/Plumbing>

Counting on bacteria

Scientists have now programmed a simple organism—*Escherichia coli* bacteria—that can count up to three.

A research program at Boston University and the Massachusetts Institute of Technology could result in an environmental or biological sensor that measures toxins and then once its job is done, it self-destructs.

The programmable bacteria could also be used as a read-out mechanism, or to control a switch.

Source: Discovery News.

Chemical Leaching in Plastics

	Polyethylene Terephthalate	Single use bottled beverages: water and soft drinks, peanut butter containers, squeezable bottles	No known risk if used as intended (only once) Some concern over possible leaching with continued use. Recycle. Use a refillable water bottle instead.
	High Density Polyethylene	Milk and juice containers, yogurt cartons, supplement bottles, margarine tubs	No known risk and recycles readily.
	Polyvinyl Chloride (unplasticised and plasticised)	Clear food packages; refillable rice container, lunch boxes and kids' backpacks	Concern over leaching of phthalates - linked to child development problems. Does not recycle well.
	Low Density Polyethylene	Bread bags, frozen food bags, squeezable bottles, microwave safe clingwrap	No known risk. Can be recycled.
	Polypropylene	Dishwasher and microwave-safe containers, takeaway containers, ready-to-eat fruit containers, kids' cups, sauce bottles, yogurt and margarine tubs.	Has high melting point and is considered safe for heating food in the microwave. Dishwasher-safe. No known risk of chemical leaching. Can be recycled.
	Polystyrene (also expanded polystyrene)	Meat trays cups and plates, styrofoam cups.	Concern over leaching chemicals such as styrene. Possible carcinogen, particularly with long storage, (one year). When used with hot liquids or foods. Difficult to recycle.
	All other plastic materials and resins are included in this category. Multi plastic laminates, acrylics, acrylonitriles, ABS, polyurethane, polycarbonates, nylon, phenolics, polyamides	Most baby bottles (unless labelled otherwise), sippy cups, childrens' hard plastic plates and bowls.	Leaches PC contains bisphenol-A (BPA). BPA has been linked to health problems such as cancer and child development. Not all number seven plastics contain BPA. Best to avoid these for food containers.

There has been much concern lately about the safety of liquids and food in general being stored in plastic containers. Baby bottles have been a particular focus of this concern because of infant vulnerability to environmental toxins.

The chart (left) is a guide to the suitability of plastics for use with drinks and food.

Source: unknown

Intellectual Property (IP) Australia produces a fine selection of FREE booklets and leaflets to aid inventors.

Their website is www.ipaustralia.gov.au

They can be visited at Innovation House East Wing, Technology Park, Mawson Lakes Boulevard, Mawson Lakes

... or contact them (for the cost of a local call)

on 1300 65 1010.

PCT Rule Changes as of 1 July 2009

26 June 2009

As of 1 July 2009 a number of PCT rule changes will come into effect.

These changes include amendments to guidelines when filing sequence listings and their associated fees. Changes have also been made to rules 46.5 and 66.8 in regard to filing amendments. Rule 29.4 has also been amended referring to the Notification of intent to make a declaration under Article 14 (4).

Please refer to the [Official Notice](#) in the Journal of 25 June 2009 for further details of these rule changes.

Intellectual Property Law Amendment Regulations

25 June 2009

The Intellectual Property Law Amendment Regulations 2009 (No.1) were signed by the Governor-General on 24 June 2009. The Amendment Regulations will appear on the [ComLaw website](#) in the near future and commenced on 1 July 2009.

The main purpose of the Amendment Regulations is to update the English text of the rules made under the Patent Cooperation Treaty (PCT) to reflect recent changes to the PCT. They will also align the various requirements for declarations in the designs, patents and trade marks legislation in accordance with current government recommendations and make a number of minor typographical corrections.

Dr Francis Gurry - Intellectual Property, Innovation and Creativity Future Global Directions Lecture

23 June 2009

Dr Francis Gurry is the Director General of the World Intellectual Property Organization. He is the highest-ranking Australian official in a United Nations agency, and only the third to ever head a UN agency. Dr Gurry is making his first official visit to Australia since his election as Director General last year.

Dr Gurry will present a public lecture at the Melbourne Law School on 3 August. The subject is "Intellectual Property, Innovation and Creativity - Future Global Directions".

Don't miss this rare opportunity to hear from the leader of the world's most influential intellectual property organisation.

For more information [download the event brochure](#).

Bookings are essential — [click here](#) to register.

From Howard...

[a patent attorney on leave](#)

An Email from a friend

Subject: Re: Need a bigger donk for your car ?

I liked this message.

In the early 1960's we built and assembled a Sulzer 7 cylinder engine in a ship we were building in the BHP Shipyard in Whyalla.

The engine was built under licence in Port Melbourne and weighed 300 tons, run and tested and then dismantled and sent to Whyalla on a fleet of ten heavy duty semi-trailers.

It was fitted in the ship's engine room in sub assemblies and was bolted to the structure by two hundred 2" fitted and reamed holding down bolts.

The crankshaft was in three sections bolted together with a total weight of 72 tons.

Bore was 750mm and stroke 1,100mm. Power was 1500bhp per cylinder at 113 rpm.

Idle speed was 30 rpm and overspeed shutdown was 115rpm.

The fuel injector pumps were individual to each cylinder and each was about the size of a Lister LT1 diesel engine.

When we were on trials the engine was stopped from time to time to allow the engineers to don oilskins and walk around in the crankcase feeling the main bearing temperatures. It was a dry sump with about 90 tons of lube oil which was filtered, and centrifuged, and I seem to remember the oil was changed about every three years.

The engine was started by injecting compressed air (300psi) through 3" pipes and manifolds into the top of the cylinders to turn the engine over.

The Ship ran between Cockatoo Island in Western Australia to Newcastle NSW via the Great Barrier Reef.

So you can see that the much bigger engine your message described, was of great interest to me.

Hope you have dodged most of the flooding we read about.

Regards.

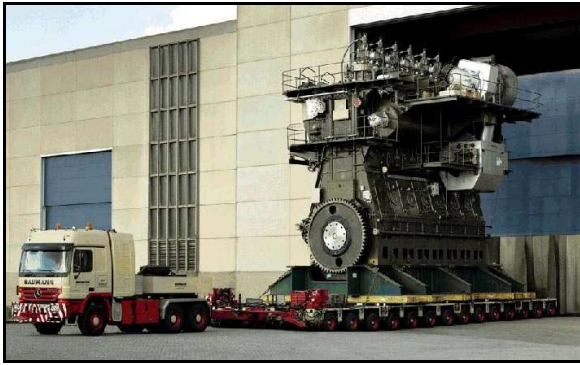
Greg Bowling

Assistant Parts Manager

Motorama Mitsubishi

The following article, *Maximum Power*, is from the details attached to this email.

Maximum Power



The Wartsila-Sulzer RTA96-C turbocharged two-stroke diesel engine was built at the Aioi Works of Japan's Diesel United Ltd. It comes in 6 through to 14 cylinder versions. (all are inline engines). They were designed primarily for very large container ships because ship owners prefer a single engine with a single propeller.

The pistons are a bit less than a metre in diameter with a stroke of about 2.5 metres. Cylinder displacement is 1820 litres and produces 7780 horsepower. The fourteen cylinder version displaces 25,480 litres.

Stats for the 14 cylinder version:

Total engine weight: 2300 tons

The crankshaft alone weighs 300 tons.

Length: 89 feet (27m) Height: 44 feet (13.4m)

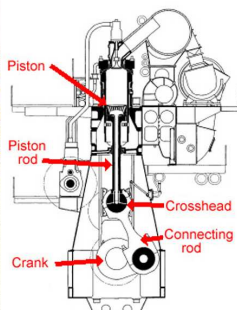
Maximum power: 108,920 hp at 102 rpm

Maximum torque: 5,608,312 lb/ft at 102rpm

Fuel consumption at maximum power is 0.278 lbs per hp per hour, and at maximum economy it uses 0.260 lbs/hp/hour.

At maximum economy the engine exceeds 50% thermal efficiency. More than 50% of the fuel energy is converted to motion—most automotive and small aircraft engines have a 25-30% thermal efficiency—even at its most efficient, the big 14 cylinder model consumes 1,660 gallons fuel per hour.

This engine is a bit different from most automotive engines, as the top of the connecting rod is attached to a "crosshead" which rides in a channel; the piston rod links the crosshead to the piston—this is probably done so the sideways forces are absorbed by the crosshead and not the piston.



Left: 10 cylinder crank sitting in the block (also known as a "gondola-style" bedplate). Right: A cross section of the RTA96C:

From Howard Schulze, Collison and Co Patent Attorneys.

NEW MEMBERS

We cordially welcome all our new members and trust that the Association can help you in your 'journey'. If you have any special requests please talk to any member of the committee and we will endeavour to help you. Committee members have a red dot on their name tags.

NEWSLETTER CLASSIFICATIONS

There are basically 3 types:

- A** The comprehensive INTERNET version on our website for *financial* members.
- Am** The MAIL copy for those *financial* members without email facilities.
- B** The B version (which is intended for FREE GENERAL RELEASE) and has been edited to remove items which are not intended for *non members*.

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'stop sending free newsletter'

Should you wish to contact the Editor, Don Ingram, regarding Newsletter matters...

phone: 08 8278 8905.

If you have any problems receiving this document (a copy should be received 2 or 3 days before the monthly meeting) please contact our IT consultant, Phillip Sanders, on admin@inventors.asn.au

Disclaimer: Inventors Association of Australia (SA) Inc accepts no responsibility for the accuracy of the information, the editorial comment, or the advertising in the Inventors News. Members and others should seek professional advice before acting on any matter herein.

REMINDER

We are now in the fiscal year 2009 – 2010. Remember, you must be financial to vote for members of the Management Committee.

Please consider putting yourself forward for election to a position on the Committee, where you can help make a difference.

Nomination forms will be available at the AGM. Alternatively, you can just print, and fill out the form on the last page of this newsletter to register your choices before the meeting.

