

OSCILLATING WATER COLOUMN TECHNIQUE TO GENERATE ENERGY FROM WAVE MOTION

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About the Author:

Author by Nature is inventor, holding four patents issued by IPO Pakistan, Five pending and several in queue to be applied for the grant of patent. Author since student life used to write down the concept of new inventions in a note book. Author describes that:

- New ideas flash into my mind since student life
- I used to note down my concepts in a Diary.
- I presented the said diary in 1977 to DR. Mian Masood Anwar; The Principal Scientific Officer Solar Energy Division PCSIR Laboratories Complex Lahore.
- He appreciated my ideas and signed the pages with positive comments

Among those inventions I noted in my diary, the concept of, “**Oscillating Water Column**”; a technique to get energy from wave motion is clearly described with diagrams and description. This idea has been reviewed and signed by Dr. Mian Masood Anwar (Late), Principal Scientific Officer PCSIR Laboratories Complex Lahore (1977).

Introduction:

There are different ways and methods to convert wave power into electricity including: Point absorber buoys, surface attenuators, oscillating water columns, and overtopping devices.

Oscillating Water Columns (OWCs) are devices that generate energy from the rise and fall of water caused by waves and tides in the ocean. OWCs have shown promise as a renewable energy source with low environmental impact.

History:

The history of research and development in this field (OWC) is not older than 16 years and goes back to the beginning of the 21st century. The major OWC Power Plant Projects installed are:

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| • LIMPET , Isle of Islay, Scotland Opened in | 2001, |
| • Mutriku , Spain Opened in | 2011, |
| • Ocean Energy (OE) Buoy , currently under development | 2006 |

Patent:

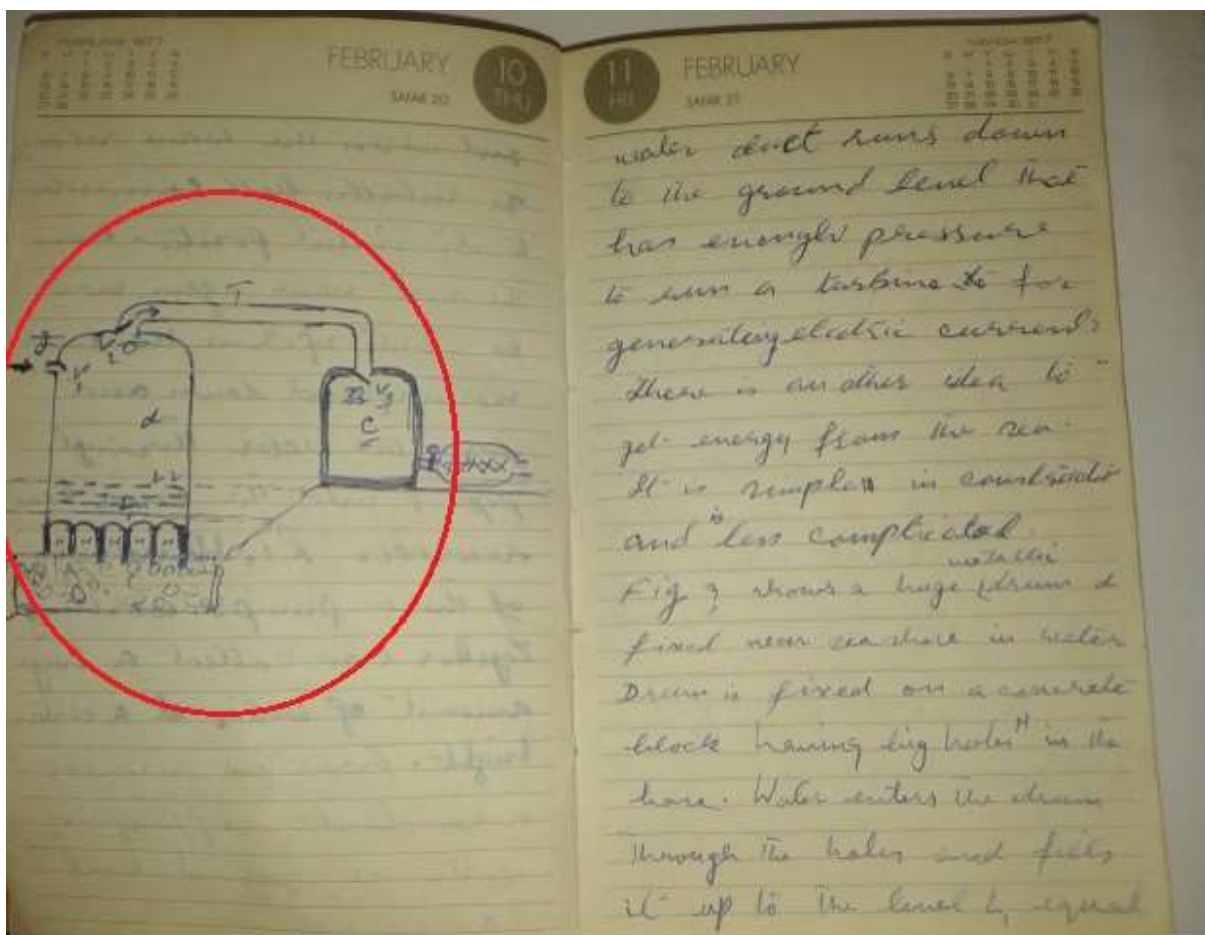
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| • US Patents: Patent US20110101696 | May 2009 |
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While I presented my concept of OWC almost 39 years ago (1977) Therefore:

I CLAIM

I claim that:

1. The "Oscillating Water Column (OWC) technique is my idea" conceived in 1970's and noted down in my "**Inventors Note Book**" in 1977 and presented to Mian Masood Anwar PSO, PCSIR Laboratories Complex Lahore, this technique is one among the several techniques to get energy from wave motion including Point absorber buoys, surface attenuators, oscillating water columns, and overtopping devices.
2. The "Oscillating Water Column (OWC) technique is my idea" as claimed in claim 1 wherein the idea was conceived by me in 1970's
3. The "Oscillating Water Column (OWC) technique is my idea" as claimed in claim 1 wherein the idea was noted down in my diary in 1977 including my other ideas of new inventions.
4. The "Oscillating Water Column (OWC) technique is my idea" as claimed in claim 1 wherein the term, **inventor's notebook** is used by inventors, scientists and engineers to record their ideas, invention process, experimental tests and results and observations.



The page from my diary