

**Somakumar R**

Technology Development Manager at GE Idea Works  
Research

<http://www.directoryinventor.com/profile/view/UHiGYiEc>

## Experience

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### Technology Development Manager

GE Idea Works

Research

September 2012 - Present

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### Manager, Electromagnetic Systems Lab

GE Global Research

10,001+ employees; Public Company; Research

2005 - Present

Driving technology developments in the area of electromagnetic systems and has had the opportunity to develop several novel concepts. Major areas of focus are contactless power transfer, leveraging electrical machines to capture the health of connected mechanical systems, rotating field based electrical impedance spectroscopy, designing electrical machines for specific electrical or mechanical loads, applications of resonating and rotating fields, electromagnetic spectroscopy for diagnostics. Many of the technologies developed are in GE products and most of them are in the process of transitioning through NPIs.

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## Education

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### CFA Charter, India

Business Finance, Investment and Financial Analysis

2008 - 2012

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### Indian Institute of Technology, Bombay

Neural Network for Nonlinear Control System Design

1995 - 2000

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## Patents (47)

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### System and method for contactless power transfer in implantable devices

Adnan Kutubuddin Bohori, Somakumar Ramachandranicker, Suma Memana Narayana Bhat

September 30, 2014: 08849402

## **[en] SYSTEM AND METHOD FOR PREDICTING MECHANICAL FAILURE OF A MOTOR**

LU YINGHUI , KUMAR AJITH KUTTANNAIR , BANERJEE ARIJIT , MUKHERJEE RUPAM , RAMACHANDRAPANICKER SOMAKUMAR , BOYANAPALLY SRILATHA , KATTA MOHAN KUMAR  
May 14, 2014: 2729323-A1

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## **Contactless power transfer system and method (3 worldwide citation)**

Adnan Kutubuddin Bohori, James William Bray, Somakumar Ramachandrapanicker, Suma Memana Narayana Bhat  
March 18, 2014: 08674550

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## **[en] SYSTEM AND METHOD FOR CONTACTLESS POWER TRANSFER IN IMPLANTABLE DEVICES**

BOHORI ADNAN KUTUBUDDIN, BHAT SUMA MEMANA NARAYANA, RAMACHANDRAPANICKER SOMAKUMAR  
January 29, 2014: 2688643-A1

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## **Systems and methods for diagnosing an engine (2 worldwide citation)**

Ajith Kumar, Somakumar Ramachandrapanicker, Paul Flynn, Arijit Banerjee, Rupam Mukherjee  
January 7, 2014: 08626372

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## **Systems and methods for diagnosing auxiliary equipment associated with an engine**

Ajith Kumar, Somakumar Ramachandrapanicker, Paul Flynn, Arijit Banerjee, Rupam Mukherjee  
January 7, 2014: 08626371

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## **System and method for contactless power transfer in portable image detectors (3 worldwide citation)**

Adnan Kutubuddin Bohori, Suma Memana Narayana Bhat, Somakumar Ramachandrapanicker, Jeffrey Neal Slotnick  
October 8, 2013: 08552595

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## **Systems and methods for diagnosing an engine (1 worldwide citation)**

Ajith Kumar, Somakumar Ramachandrapanicker, Paul Flynn, Arijit Banerjee, Rupam Mukherjee  
September 17, 2013: 08538626

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## **SYSTEM AND METHOD FOR LOCOMOTIVE ADHESION CONTROL**

HOUPT PAUL KENNETH, MCGARRY JEREMY THOMAS, KUMAR AJITH KUTTANNAIR, WORDEN BRET DWAYNE, DAIGLE JEFFREY LOUIS, RAMACHANDRA PANICKER SOMAKUMAR, RYALI VENKATARAO  
June 4, 2013: 2613519

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## **Contactless power transfer system (1 worldwide citation)**

Adnan Kutubuddin Bohori, Somakumar Ramachandrapanicker, Christof Martin Sihler, Arvind Kumar Tiwari, Suma Memana Narayana Bhat  
May 14, 2013: 08441153

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[View all \(47\)](#)