

CURICULUM VITAE

by Elmar Clemens Grandy
born on January 01, 1956 in Munich, Germany

Since 2002 until today Elmar Grandy runs his own engineering office; EG- Engineering in Weidenweg 7 in 85764 Oberschleißheim. Besides the fulfillment of construction and development orders for industry and economy, he also devotes himself to his own research and development as well as to the planning and construction of plants for the use of renewable energies. The further development and improvement of various components of solar thermal power plants are also part of his activities as well as the creation of new practicable concepts for energy storage.

Besides a profound apprenticeship and study in the areas mould construction, engineering – specialization in machine construction and industrial design - Mr. Grandy has a long-lasting experience in different technical departments of diverse companies and enterprises. His professional career began in the construction department of Phillip Morris in Munich.

Elmar Grandy was then engaged for a long time by the management consultancy Woltermann and Partner for a number of different medium sized companies as consultant for the production line optimization and process steering of industrial production processes.

As product manager of the company ASIAMED Mr. Grandy was not only responsible for the permanent development, improvement and quality control of sterile medical one-time disposable products but also significantly for the construction of a machine - unique in Europe – for the fully automated production and packaging of acupuncture needles of different sizes, types and modules.

Elmar Grandy planned, developed and implemented a large sized display board for the gas network control, load balancing and load sensing for the company BAYERNGAS AG, a regional energy supplier.

Mr. Grandy was involved as external developer in a municipal city bus concept of the company MAGNET MOTOR. The task was to develop a

special wheel motor that enables the recovery of the braking energy and the reutilization for the acceleration. This led to a significant reduction of fuel and simultaneously to a reduction of pollutant emission.

Mr. Grandy planned and developed for the company SEIRIN in Frankfurt an accumulator operated laser for medical treatment to series-production readiness.

Since the year 2005 Mr. Grandy is predominantly working on the permanent development of the motor that he invented and already patented. This entirely novel motor, which kinematical principle differs from all known motors, is characterized by a significantly improved degree of efficiency besides other advantages. This motor was originally planned as a combustion motor but it can also be implemented as a steam motor.

Due to a much higher efficiency these steam motors can replace turbines e. g. when building solar thermal power plants.

For the improvement of the degree of efficiency of solar thermal power plants and the cost-effective production of reliable components of these plants Mr. Grandy can revert to a number of own patents, inventions and developments.

The first application for a patent at the German Patent- and Trademark Agency in Munich was already – a novel traffic management system. This patent was immediately bought from the company INTERTRAFFIC, a subsidiary of DASA (now Daimler – Chrysler AG).

Since that time, Elmar Grandy has developed numerous successful inventions as well as a number of technical improvements in various fields.
To date, MR. Grandy has registered more than 50 inventions both nationally and internationally. Currently, further new inventions in the field of renewable energies and the further development of his engine are in progress or the patents have already been applied for.

Well respected and also appropriate technical press in Germany have repeatedly have given account on innovations, developments and projects of Mr. Grandy.

Mr. Grandy has also been awarded several times for his inventive activities. 2006 the company WSN Neuhaus GmbH & Co. KG received the EUROMOLD Award in Gold for a sterile commodity container for medical one-time disposable products invented, developed and constructed by Mr. Grandy.

Mr. Grandy received another award 2007 in a competition of the Federal Republic of Germany together with the DEUTSCHE BANK for his patent

"4security" a secure transmission protocol. He was officially rewarded and honoured by government.

Mr. Grandy does not only possess a wellfounded technical education but also possesses manifold practical experiences, the power of innovation and a high degree of creativity. He has also proved that he is able to implement large projects and tasks successfully.

References:

- **Prof. Dr.-Ing. Joachim Heinzl,** Technical University Munich; President of the Bavarian Research Fund; The inventor of the telefax machine and the ink jet printer.

- **Prof. Dr.-Ing. Hans-Hürgen Schorcht,** Technical University Ilmenau; sector: machine elements.

- **Boris Nalbach,** CEO Collax; co-founder of the company ELSA; previous CTO at Nemetscheck AG, SUSE and NOVELL; cooperation partner fort he further development and implementation of our project „4security".

- **Dr.-Ing. Jürgen Schmidt,** CEO of the company MOMOX GmbH.

- **Dr. Klaus Teichert,** CEO of ASIAMED GmbH & Co. KG.

- **Yvo Junckers,** CFO of PANSOLAR; Grandson of the famous German Inventor Hugo Junckers.

- **Dr. techn. Blerim Rexha,** Deputy Minister of Energy, Republik of Kosovo.

- **Prof. Ogunlade R. Davidson,** Minister of Energy, Republik of Sierra Leone.

- **Dr. Christian Sheka Kargbo,** Ambassador Extraordinary & Plenipontentiary to the Kingdom of Belgium and the European Union, Chairman of the APC Countries.

- **Peter Capeller,** UN Ambassador,

- **Peter Okon,** CEO of IETI EUROPA, European Development Commission

- **Xingle GAO,** Consul, Department of Economy and Trading of the Peoples Republic of China in Munich, Germany

- **Dr.-Ing. Friedrich Sperling,** Technical Advisor and CEO of the Institute for Process Management and Production Technology PROMTEC GmbH

- **Per Kleinschmidt,** Senior Manager Site Management Power Plants MAN Diesel SE

- **Armin Wenzel,** Global Procurement & Supply, Mercedes- Benz Cars and Vans, Daimler AG

- **Josef Schulze Sutthoff,** Head of Business Development, WOLFSBURG AG

- **Dr. Armin Kempf,** Project Manager, EURO INNOVATION S.A.

- **Dr. Michael Schwaiger,** Chairman of the Supervisory Board, UN-SOLAR INC.

- **Dr. Hans-Joachim Kohnke,** CTO of GASKATEL GmbH. Co. for Hydrogen Research and Fuel Cell Development; cooperation partner for our energy storage project and partner of H2-Energy GmbH.

- **Joachim Helmke,** CEO of GASKATEL

- **Dr. Oliver Hertz,** Patent Lawyer and Grandson of the famous German physician Heinrich Rudolf Hertz, the physical unit for electric oscillation was named after him.

- **Dipl.-Ing. Achim Schweizer,** Patent Lawyer

- **Walter Fürst,** Managing Director of Media Mind

- **Gerhard Bornschlegel,** CEO of WSN Neuhaus GmbH & Co KG