

## **Resume of ir. W.J. Vogel. January 2010. pag. 1/3.**

### **Personal information:**

**Name:** Vogel, Willem Jan. (call name: Wim).  
**Date of birth:** 9 maart 1953.  
**Home address:** Kramersstraat 2, 5612NV Eindhoven, The Netherlands.  
**Phone numbers:** GSM : +31-6-29393856 , home : +3140-7850345 .  
**E-mail address:** vogel.wim@gmail.com  
**Status:** Single.

**Title:** 1979 Electrotechnical Engineer (Master's Degree), TU Delft, specialism: Telecommunication.  
**Earlier certificates:** 1971 HBS (Hogere Burger School) - B.

### **Courses:**

1982 Elektromagnetic Compatibility (Philips)  
1984 Programming with Pascal (Teleac)  
1987 Timediscrete Signalprocessing (Philips Nat. Lab.)  
april 2004 Isolation Diagrams  
may 2004 UL 2601 / IEC 60601 / CSA

### **Expertise:**

Analog Electronics, Measurement and Control Technic, RF Technology (- 3500 MHz), Radio and Television Technology, Predevelopment, Product Development, Quality Engineering, After Sales Service, Maintenance, EMC/ESD, Telecommunication, UL2601 / IEC60601 / CSA certification, Law concerning product specifications, safety, consumer rights, training of Field Application Engineers, technical consultancy and consultancy in law.

### **Experience:**

1974 - 1979 : Delft University of Technology, section Electronics, Transmission of Information.  
Student-assistant, 0,5 fte – Assistant of the professor during lectures , giving demonstrations during lectures, management of labs for students, etc.

1979 - 1988 : Philips Consumer Electronics

Product development of Color Television sets, EMC, ESD. Solving field complaints of sold Color Television sets. Predevelopment of the RF part of a chip for a one-chip TV project at the Nat Lab of Philips.

1988 - 1997 : Consultant for medium and small sized business organizations, delivery of self-developed new electronic products following customer specifications.

Some customers:

Herder BV ([www.herder.nl](http://www.herder.nl)) . Designing a new electromechanic construction for their mowing arms: a new electronic control system for the lift power of these arms.

IMT BV ([www.IMT.eu](http://www.IMT.eu)). Solving a field complaint about a solid state relay circuitry used in combination with high power electromagnets. Design of a new control circuit following customer specifications.

Syntens ([www.syntens.nl](http://www.syntens.nl) , formerly: Innovatiecentrum, Eindhoven):

Working as consultant in Electronic Engineering, giving short specialized advise to customers of Syntens.

1992 - 1997 : Also working for several education institutes: PBNA Arnhem, SBK-Kenners van Kennis, Helmond.

Giving education in the area of Industrial Automation and Electronic (Time discrete) Signal processing; also examination of candidates at the customer location.

Customers: Rijksuniversiteit Leiden, Digital Nijmegen, Golfkartonfabriek Helmond and Coca-Cola Factories Ede.

1992 - 2001 : The Vereniging voor Elektrotechnisch Vakonderwijs, Nijkerk (Actually: Kenteq , [www.kenteq.nl](http://www.kenteq.nl) ). Working as examiner for the course Technician Television and Radio.

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**Nov. – Dec. 1997: Melkert job at Evenementenpool, building stands for exhibitions at Eindhoven.**

**1 Jan. 1998 - 31 March 2002: Technipower BV, Eindhoven, detached at Philips Medical Systems, Best. 1998: Technical representation of Philips Medical Systems at the purchase of low-cost medical monitors; solving technical problems and writing special requirements for Philips Medical Systems; writing a requirement specification and a verification specification.**

**1999 - 2002: Development of a CCD camera for Rontgen application; taking over the work of 2 product engineers (bachelor's degree), further work: see the next overview.**

**Overview:**

- 1. Solving disturbances of the process (hot issues) at the production of medical systems and equipment.**
- 2. Solving errors in electronic products, especially cameras for medical systems.**  
This activity concerns the analyze of the problem, finding the cause, finding a solution, validating the solution, formal release of the modified product and the final realization at the organization (Operations).
- 3. Solving obsolescence problems of the used components and finding usable components and circuits for replacement of the original ones in the known applications.**
- 4. Analyzing print-layouts (architecture, the best possible position of components at the PCB, EMC/ESD issues).**
- 5. Following courses and seminars (especially analog electronics).**
- 6. Quality management for the delivered products, solving specific field complaints (after sales service).**
- 7. Together with colleagues, reviewing of medical subsystems and products following quality requirements, published in UL2601, IEC 60601 and CSA as far as applicable. These publications are concerning the electrical safety of the patient and the medical staff, also in the case of a single fault condition, like a single short-circuit in the mains power supply.**

**1999 - 2002: Solving problems of production concerning High Voltage generators for rontgen picture amplifiers ; Analyzing defects and the root cause of these defects, giving the best possible solution for the production problem, preventing production stops.**

**1 april 2002 - 31 dec. 2004: Philips Medical Systems, Best: Continuing the abovementioned work at a fixed position at Philips Medical Systems:**

- 1. Solving disturbances of production of medical subsystems (cameras and controllers).**
- 2. Solving faults, analysis of problems and the root cause, development of the solution, validating the solution, formal release and the final realization at the Department of Operations.**
- 3. Solving obsolescence problems of the applied components, giving possible replacements or other options (last time buy, etc.,).**
- 4. Review of print-layouts (architecture, right positioning of the components at the PCB, EMC/ESD related technical issues).**
- 5. Following courses (education), especially concerning Analog Electronics and know-how about PChardware, fixed and wireless home networks, applications of the PC, VOIP, hardware solutions).**
- 6. Guarding and managing the quality of the delivered products, solving field complaints (after sales service).**
- 7. Qualified for reviewing medical subsystems and products conform the requirements of quality, specified in UL60601-1, IEC 60601 and CSA, if applicable. These quality requirements are concerning the safety for the patient and the medical staff, also in the case of a single fault condition, like a single short-circuit in the power supply.**

**1 January 2005 – 31 December 2006: Available for new position due to reorganization; reintegration trajet followed at UWV Eindhoven in co-operation with the reintegration organization Werkconsult.**

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1 January 2007 – now: Catena Radio Design B.V., Son en Breugel, ( [www.catena.nl](http://www.catena.nl) ).

**Current Position:** Test-, Measurement and Application Engineer.

**Latest work carried out:** Test and development of applications, optimizing the quality of reception for Car radio integrated circuits, Training of Field Application Engineers.

**Keywords:** RF gain, RF and IF selectivity, sensitivity, intermodulation, crossmodulation, desensitization, blocking, oscillator sideband noise, gain distribution, distortion, harmonic mixing, IQ correction, image rejection, spurious rejection, unwanted carriers, whistles, intermodulation free dynamic range, spurious free dynamic range, EMC, ESD.

Since 2007, I have built up extra expertise at Catena Radio Design, concerning Radio Frequency Electronics and optimizing the reception quality of integrated circuits, used in Car Radio applications. These IC's offer a very good quality of reception for the price of the component, including the peripheral components. The reception quality remains good throughout the whole broadcast bands used, including full coverage on shortwave (2.3 – 26.1 MHz) for some applications. The production of car radios in the factories can take place now without the necessity of handmade adjustments for the RF reception part.

### **Extra information:**

In June 2001, I have solved a problem for Philips Consumer Electronics, causing premature defects of the mains power supply for Plasma TV's with a PFC (Power Factor Correction circuit) after short dips in the mains voltage.

In 2001, I earned an extra bonus for the prevention of a two-weeks production stop of High Voltage generators, used in Philips Medical equipment.

In 2002, I earned a Quality Award for the manner of improving the Controlboard of the XTV-8 camera, causing a reduction of number of defects in production far below 1% before delivery. Philips Medical Systems is now able to use a fine-tuning procedure of the Controlboard, causing a constant and good quality of delivery of these cameras from the factory.

In 2003/2004, I designed a circuit for very accurate measuring of the current of a fotocathode (2 nA – 10  $\mu$ A) of a Rontgen image amplifier tube. A very expensive fotodiode is not longer necessary, because it is possible to realize a dose control using the accurate measurement data.

I am a member of Het Nederlands Elektronica en Radio Genootschap (N.E.R.G.) .

Also, i have experience as radio amateur (HAM) for more than 20 years in which I was also a member of the Vereniging voor Experimenteel Radio Onderzoek in Nederland (V.E.R.O.N.) and Het Koninklijk Instituut van Ingenieurs (K.I.V.I.).

2007 – 2009: Working as Application Engineer at Catena Radio Design, specialism RF and Radio Electronics in car radio applications; optimizing the reception quality of tuner IC's for car radio, designed at Catena Radio Design, training of Field Application Engineers.

**Internet site:** [www.mate.nl/wvogel](http://www.mate.nl/wvogel) .