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Minister

Peter Altmaier

- personally -

c/o Federal Ministry for

Economy and Energy

Scharnhorst road 34-37

10115 Berlin

**Possible savings of billions of euros for operators of all systems operated with chains**

**Conservation of environmental resources**

Dear Minister Altmaier,

I take the liberty today to write to you once, since I have taken it from the Internet that you are a native of Ensdorf an der Saar.

Then you certainly know the **Ensdorf power station**; this was shut down some time ago, but there is still a portal scraper in use and the **unique thing** about this portal scraper is that it went **into operation on 19.04.2001** and **since then has been operated with the same chain from Ketten Wulf**.

**However, this is only possible** because the chain works with **two "self-adjusting sprockets" developed by me**, which were patented on 26.5.1993.

As far as I know, there has **never been a time when** a chain has **NOT** had to **be changed once over** a period of **18 years**.

Below you can see a picture of the portal scraper in the power station Ensdorf, which has been shut down in the meantime, in which the coal still is mined by the portal scraper.



I had developed this patent at the time as an employed designer, it was registered by my then employer and transferred to me in 1996, i.e. since **1993** I have been working on the idea that, by using the "self-adjusting sprocket", operators will be able to ensure that the **chains** they buy for a **lot of money** and **manufacture with a lot of resources** have a considerably longer service life.

Right from the start, I was concerned that the many **operators of all** chain-operated systems should be able to benefit from having their chains in use for considerably longer, thus saving a great deal of money and protecting the environment by producing fewer chains.

### **What is so special about the "self-adjusting chain wheel"?**

For decades I have been dealing with this topic, that due to the special design of the chain wheel developed by me, all teeth are involved in the power transmission to the chain and thus the load is distributed to the individual teeth and the chain. The reason is that the teeth are movable, whereas with a conventional sprocket the teeth are rigidly arranged and after a certain period of wear only the first tooth carries the load of the chain.

**It goes without saying that the chain manufacturers were not and are not enthusiastic about such an enormous reduction in wear.**

You can see this impressively, for example, from the fact that the **company Ketten Wulf**, whose **chain together with two "self-adjusting sprockets"** has been in use in

**Ensdorf since 2001, which also tested the first patent in its own factory between 2002 and 2004, even sued me in 2015,** after I had filed a new patent application in an improved form, the patent was also granted because I had put the **investigation report from that time on the Internet.** This **interim report already ended with a saving of 30 %** - after that the tests were finished, because I don't want to wait for the result any longer! A rogue who thinks evil.

From the investigation report on a test phase lasting more than two years, it was already apparent that the reduction in wear was already over 30 %.

Below is a short text from the investigation report:

**Result:**

As can be seen from the evaluations and the diagram, all the Test samples on the sprocket, Herkenrath a lower wear compared to the chains Wulf wheel on Herkenrath. Furthermore, it can be seen from the tests that the chain wheel according to the Herkenrath construction principle has a particularly positive effect on increased wear.

Kückelheim, 06.02.03"

## **Application of the new patent EP 2 594 824 at the European Patent Office**

After applying for the patent in November 2011, which was further developed by myself, and then being granted in 2015, I offered the purchase of the patent with then 10 industrial property rights first to the chain industry and later made it public worldwide on the Internet.

Details can be found in **chapter 7 of my book.**

On this occasion I also published the *old investigation report of the Ketten Wulf company* on the Internet, whereupon the Ketten Wulf company became "evil". This investigation report was subject to the so-called "small coin", since it carried an "old logo" of the Ketten Wulf company.

Actually, you can only laugh if you quote from Wikipedia:

..."The *small coin* determines the **lowest limit of the works that can still be protected by copyright.** It is therefore also referred to in a much quoted sentence as the "**stepchild of copyright**"<sup>[1]</sup>, but it is true that "even the small coin is still a coin, although on the border it is still just in the concept of copyright protection".<sup>2]</sup> The work in question must have a sufficient degree of creative content in addition to the requirements of the concept of work.

The term "small coin" merely means that the standard can be set low with regard to the design height. Thus, even simple works can be protected by copyright, which have a low degree of individual, creative and creative expressiveness. What is decisive is that a creatively valuable and therefore worthy of protection achievement was created. The degree of necessary expressiveness is demanded to varying degrees by the various types of work...."

As you can see from the book with all the details, since 1995 I have "**run my feet flat in the chain industry**" regarding the original patent, so to speak. At first, the chain manufacturers were totally enthusiastic about my idea every time, some also wanted to conclude license agreements with me, but when it became clear to them how high the savings would be, they **quickly abandoned the** idea of marketing, see **Chapter 3** and others.

Some magazines became attentive to the patent and due to the article "**Kostenreduzierung bei Förderanlagen durch selbstjustierendes Kettenrad**" published in 1999, the technical director of the former company Koch Fördertechnik, Mr. Wolfgang Bertele, became attentive to the patent and so it came that finally two patented sprockets were installed in the portal scraper in Ensdorf.

Please refer to **chapter 5 of the book** for details. Here you can also read that at **that time they were still able to implement a good idea Quickly**. In October 2000 a license agreement was signed between the Koch company and me, the chain wheels were built there and the portal scraper with the two "self-adjusting chain wheels" was already put into operation in April 2001.

**Nobody would have dreamed at that time that these "self-adjusting sprockets" together with the chain would still work perfectly after 18 years without having been replaced.**

**Anyone who has learned to calculate in Germany can perhaps calculate how high the reduction in wear may be after 18 years of use at the Ensdorf power station?**

**To my knowledge, Saarbergwerke alone spent around DM 30 million a year on new chains in the 1990s.**

"**Attracted**" by the use of the self-adjusting sprockets in the Ensdorf power station, Ketten Wulf appeared on the map in 2001 and signed a license agreement with me and the self-adjusting sprocket was tested together with a conventional sprocket on a chain simulator.

After they realized that the wear reduction was already at 30 %, they stopped the further investigations "quickly", stirred up the hope that Ketten Wulf would continue to market the self-adjusting chain wheel and in 2004 they let the matter "run out" and terminated the license agreement with me, after they paid no license fees before, because they were supposedly still busy with test series.

From the very beginning I had the idea that by using my "self-adjusting chain wheel" for **WELL the operator** could save billions, that noise could be minimized (which was a prerequisite for the approval of the portal scraper in Ensdorf) and that resources could be saved.

The longer I think about this thing, the more I have to laugh about my attitude, **so only a designer can think about a longer service life and savings for the operators, mind you for the operators. My wife always tells me: "That was very stupid of you, why didn't you invent a patent that would have increased wear?"**

As one operator aptly wrote some time ago:

**"Good luck. I'm afraid the manufacturers are glad..."**

Under **chapter 6** of the book you can read about my "special experiences with Ketten Wulf".

At the end of 2018, I gave up 5 of the 10 existing intellectual property rights, the remaining 5 for Germany, Austria, France, Italy and the Czech Republic continue to exist.

I read on the Internet that you have published a brochure on energy saving tips and called for a change of electricity supplier. I would imagine that the operators of chain-driven plants would also very much welcome it if they could make savings in the millions, depending on how many chains are in use in a plant.

If you are interested, I am always available for further information and you can read about my experiences with this patent in the book "Erfinder mit langem Atem" published in 2017.



Below you will find the link to a PDF file of this book:

[» Book: Erfinder mit langem Atem as PDF-file \(in German language\)](#)

Now I let myself be surprised if I could arouse the interest of the Federal Minister of Economics and Energy regarding my invention "self-adjusting chain wheel" and remain so for today.

kind regards