

INSIGHTS INTO THE PATENT AND PROPERTY RIGHTS WORK OF BEKA HEIZ- UND KÜHLMATTEN GMBH

25 Years Capillary Tube Mats of the Brand name "KaRo"



FURTHER DEVELOPMENT AT BEKA

Since the formation of the BeKa Heiz- und Kühlmatten GmbH in 1996, the property rights and patent strategy was continued hand in hand with the further development of capillary tube mats.

In this process, BEKA benefits from the competence of the renowned law offices Maikowski & Ninnemann from Berlin and Grünecker, Kinkeldey, Stockmair & Schwanhäuser from München/Berlin for patent applications and the permanent surveillance of the industrial property rights situation in the market.

From the very beginning, the company BEKA pointed the way for the continuous technological development of the products and manufacturing procedures with the application for 20 patents and 7 utility models. Every year new applications are filed.

CONTINUATION OF THE KARO BRAND

In 2008, BEKA took over the "KaRo" brand with all marketing rights and furthermore several patents by the inventor Donald Herbst which strengthened the company BEKA.

Since the invention of the plastic capillary tube mat for heating and cooling purposes, proprietors and employees of BEKA belong to the pioneers of this innovative air-conditioning technology. The origin of the capillary tube mats goes back to the German inventor and entrepreneur Donald Herbst. Until 1989, the graduated engineer of air-conditioning technology was director for Engineering and Sales of the former Dr. Walter Herbst AG, a company that with 800 employees ranked as one of the largest air-conditioning companies in Germany at that time. Today, he is one of the

shareholders of BeKa Heiz- und Kühlmatten GmbH.

BIRTH OF THE KARO CAPILLARY TUBE MAT

25 years ago, on 20 January 1986, Donald Herbst registered the "Ka.Ro" brand with the application number H55499 for the capillary tube mats invented by him. Since then, "KaRo" has become the internationally known brand for capillary tube mats. The brand is protected internationally with numerous patents for application and manufacturing of the mats.





Albrecht Bauke and Reinhard Sobczyk, then managers of BEKA, with Donald Herbst, inventor of the capillary tube mat, taking over the KaRo brand in 2008.

PROPER DEVELOPMENT OF MECHANICAL ENGINEERING

Today, the inventions and trademarks of BeKa Heiz- und Kühlmatten GmbH are protected by 6 confirmed patents, 7 utility models and 2 brands.

Of the many property rights, patent DE 19725326.1-09 and the patent application DE102006061995.1 carry great weight. These two secure the BEKA inventions for special machine parts of the heating element in all three welding machines. This is the core of BEKA's know-how. For this reason, the patent was registered also



Manufacturing of BEKA capillary tube mats with modern machinery, designed especially for and in collaboration with BEKA.

in China and thus ensures export into this emerging region.

BEKA shows that it is important also for a medium-sized business to protect own inventions with a property rights strategic in order to ensure the technical and technological progress.

ONGOING INNOVATION FOR A SECURE FUTURE

One principle was always valid for BEKA: Independence from external property rights – with respect to manufacturing and necessary machinery as well as with respect to the capillary tube mat itself and its applications.

BEKA manufactures only with machines that were constructed specifically for BEKA resulting from proper development. The unconditional compliance with this principle guarantees the BEKA clients now and in future a reliable supply of BEKA capillary tube mats. The success story of KaRo capillary tube continues.

BACKGROUND

Origin of the KaRo Idea

In the 1980s, the German engineer Donald Herbst was looking for a solution to heat and cool buildings in an efficient and energy-saving way. Nature impressed him with its fascinating capillary network.

Following nature's model, he designed a mat of thin and therefore fast-reacting tubes that imitate the capillary network. The capillary tube mat – in short "KaRo" – was born.

Similar to veins in leaves or human blood circulation, capillary tube mats control heat in buildings in an efficient and healthy way – without draught or noise.

Under the direction of Donald Herbst and subsidised by EU funds, first buildings were equipped with capillary tube mats in the 1980s. Since then, the successful capillary tube technology spreads internationally.

More information on the origin and idea of KaRo is available on the KaRo website: www.karo.cc.



The widely ramified capillary network gave the original idea for the invention of capillary mats.