

Technology Jump in Window Pane. Sensational Swiss Invention as a great Contribution to Environmental Energy Savings that e.g. Air Purity.

Worldrecord Superinsulation- Sounddeadening Window Pane

With up till now held for an impossible insulation capability. The only 8 mm thick new windowpane insulation is as good as 200 mm thick glasswool.

Today's insulated window pane technology is 40 years old. The U- value of intially 3.0 Has, in the meantime with low E- layers, raregas filling and with a 2- screen window pane, been reducted to 1.0 (3 screen 0.5). this 40-year old insulation technique has been exhausted and pushed to its end. Improvements are no longer possible.

While exteriorwalls in new buildings with U- values of 0.2 are standard, windows are still far removed from this and are being described as coldholes by the building technique. An improvement imposed itself, but with the old technique was never realizeable.

A new invention with a sensational, new technique brings a jump to U- value improvement of 500 % to a 2- screen pane window, with high total energy passage and at the same time high sounddampening.

The Baechli superinsulation- and sounddampening windowpane is only 8 mm thick, has a U- value of 0.2 and will be able to be installed in existing windowframes at a favorable price.

The currently existing sounddampening windowpanes are 40 mm thick so that their installation into existing windowframes is impossible. These windows would have to be removed, which, naturally would substantially increase the cost, whereas with the new invention only the windowpanes would have to be replaced with this much superior product.

With the sound renovations at airports, railroads, highways etc. one could install these new 8 mm thick superinsulation- sounddampening protecion windowpanes on apartment buildings, offices and schoolhouses at a fraction of the other replacement costs. In addition to the sounddampening protection, one could also gain from the **worldrecord- U- value of 0.2, sizeable heating cost savings** which amortize the new replacement windowpane costs rapidly.

With the sound noise improvement of buildings at the airport Zuerich- Kloten one could save an estimated Fr. 100 mil. or one could sound improve many more houses within the anticipated budget.

In addition with the renovation, e.g. the replacement of existing windows with Baechli superinsulation- and sounddampening windowpanes, one is able to save money. The price advantage can also be achieved by completely new windows, since the only 8 mm thick lightpanes do not require the massive indowframes as before.

In addition, the noice reduction scheme planed by the Government at railroad lines Y could be achieved for Fr. X millions cheaper.

The invention has been achieved at the right time since airpollution, environmental noise and earth warming are constantly emphasized in the news. The Baechli superinsulation-and sounddampening windowpane is also able to substantially reduce the airpollution by cutting back the need for heating oil usage as well as noise pollution damages, on an economical basis. The new windowpane of only 8 mm thickness has the unbelievable heat insulation capability of 200 mm thick glasswool. In addition, it is also 25- times better. It opens completely new possibilities for transparent facades on buildings.

The construction of favorably priced buildings without conventional heating will become possible. The new panes with U- value 0.2 as a transparent facade with automatic shading effect in summer is by far the world's first product with which, due to its vacuum pack, also in cold, foggy winter weather and lack of sunshine as well as weak lighting of only 30- 50 Watt/m², even temperatures preserves and so the outside walls of a building will be warmed-up as well. By the thinness of this 8 mm thick insulationplate saving of buildingcubicvolume is achieved. Today's fear of humidity to soak through the glasswool and foam insulation is absolutely impossible in this with this new invention.

Current energy prognosis are being shaken with this invention and it foresees that this pane will celebrate a worldwide victory of triumph.

The worldwide insulation windowpane production is currently estimated at about 250 mil. m² per year. The market potential is therefore enormous large.

The invention will not only maximize and revolutionize the heat preservation and the noise insulation, but also can be applied for refrigeration insulation. In a conventional refrigeration room of 200 mm wall thickness insulation and 200 m³ volume, results by the application new superisolation of glass 8 mm, a space profit of 36 m³ or 18%. This new cold storage room has glass-clean walls. By discontinuation usual plaster and these new cold storage rooms become a saving of 18% Baukubatur Construction volumes , rather more inexpensive. Another advantage is the absolute humidity permanence of this glass-flat-invention.

In price sound insulating glass becomes new Bächli-superisolation more favorable to stand come as conventional 3-discs of glasses with krypton gas filling, because the inventor not only the glass, but in addition new, especially economic ones, fully automatic manufacturing method has developed. The new glass became with him the first price of the German energy company excellent.

The present invention of the new Superinsulation- Sounddeadening Window Pane is a 34 year-old development of a company from Endingen, Switzerland, which has already led many inventions to the success.

The components and robots for the manufacture of the Superinsulation- Sounddeadening Window Pane is developed and realised partially already, so that with the construction of her Manufacturing plant immediately can be begun. The construction time amounts approx. 1 – 2 years.

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