COOLING STAMP

Verena Blunder
Bertrandt Ingenieurbüro GmbH

Follow this and additional works at: https://www.tdcommons.org/dpubs_series

Recommended Citation
Blunder, Verena, "COOLING STAMP", Technical Disclosure Commons, (January 28, 2020)
https://www.tdcommons.org/dpubs_series/2904

This work is licensed under a Creative Commons Attribution 4.0 License.
This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.
COOLING STAMP

**Technical task:**
Cooling of the cover of an electric motor housing.

**Initial situation:**
During the final assembly of electric motors, the housing must be heated with an inductor in order to be able to build the stator into the housing. The aluminium body of the housing is not homogeneous because it is fitted with two metal covers which close off the coolant channels. Due to the inhomogeneity of the aluminium body, the housing does not heat up constantly and the covers overheat. The removal of the covers before shrinking or the shielding from the inside are complex. The conversion of the inductor is complicated.

**Solution:**
Outer cooling stamps which fit exactly on the surface of the lid and provide cooling.

**Advantages:**
- Fast and inexpensive production
- Suitable for series production

**Possible application:**
The cooling stamp is made of aluminium and fits exactly on the metal lid. The cooling stamp is equipped with an adjustable compressed air nozzle so that air can reach the overheated points of the lid. The direction, quantity and temperature of the air flow are adjustable. The nozzle is equipped with silencers.