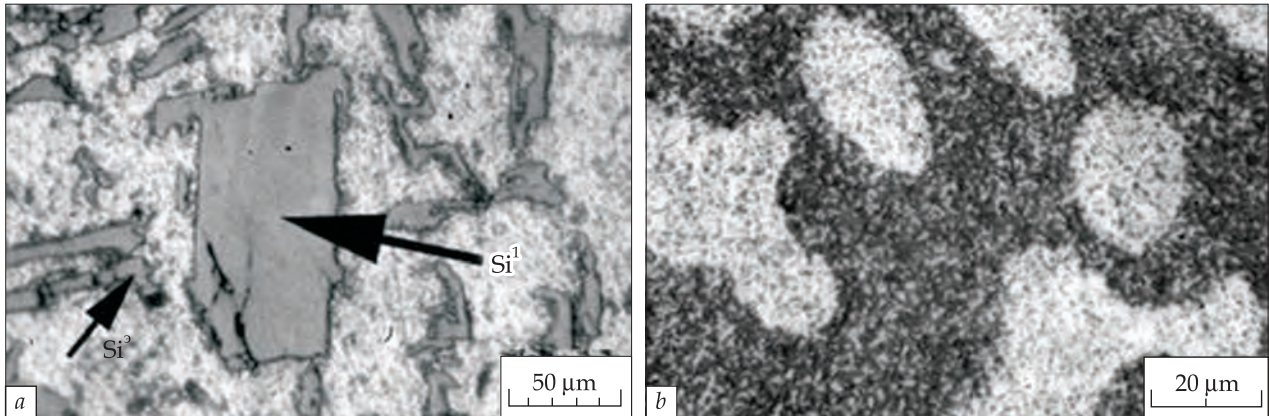


## TECHNOLOGY FOR MODIFYING ALUMINUM ALLOYS



Change of the structure of alloy Al-18,5 % Si before (a) and after treatment of the melt by electric current (b) with special regimes

### Areas of Application

Production of cast articles with enhanced properties for aerospace industry, machine, and shipbuilding, etc.

### Specification

Modification of melts using electric current during 5–20 s

### Advantages

Production of finely structured aluminum alloys with nanoelements; enhancement of mechanic properties of industrial aluminum alloys smelted from waste and scrap:  $\sigma_b$  by 10–40%,  $\delta$  1.5–3.5 times, HB by 10–16%; neutralization of iron harmful effect

### Stage of Development. Suggestions for Commercialization

IRL3, TRL4  
Trial batch manufacture, upon request

### IPR Protection

IPR3

### Contact Information

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