

## **ABSTRACT OF THE DISCLOSURE**

5           The present invention provides an air-cooling mechanism, an air guiding member, and a heating device. The air-cooling mechanism comprises: an air guiding member; and an air blowing member which is spaced from the air guiding member. An air-cooling area is formed between the air guiding member and the air blowing member, the air-cooling area is provided with an air inlet and an air outlet along a first predetermined direction for materials to pass  
10 through, and the air inlet of the air-cooling area is arranged near a heating area; the air blowing member is configured to blow air towards the air guiding member to form a cooling airflow; the air guiding member includes multiple air blocking plates and multiple air deflecting plates, the air blocking plates are configured to block the cooling airflow from flowing out of the air-cooling area, the multiple air blocking plates are spaced along a second predetermined  
15 direction, and an air outlet gap is formed between adjacent air blocking plates; the air deflecting plate is connected to the air blocking plate and extends into the air-cooling area, the air deflecting plate is configured to block the cooling airflow in the air-cooling area from flowing towards the heating area and guide the cooling airflow in the air-cooling area towards the air outlet gap, so that the cooling airflow flows out through the air outlet gap. The air blocking plate  
20 provides insulation for the heat in the air-cooling area, while the air deflecting plate can limit the diffusion of heat. In this way, the air-cooling mechanism can cool and solidify the materials in the air-cooling area through the cooling airflow.