

Title (en)
LED lamp and heat dissipation device thereof

Title (de)
LED-Lampe und Wärmeableitungsvorrichtung dafür

Title (fr)
Lampe à DEL et son dispositif de dissipation de chaleur

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Application
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Abstract (en)
The present invention provides a heat dissipation device, which comprises: a base (10); plural heat dissipation pipes (20), wherein each heat dissipation pipe (20) is hollow and formed in an L-like shape, one end thereof passes the base (10), the other end thereof is received at the bottom of the base; and a heat dissipation plate (30) having a main body (31), the center of the main body (31) is formed with a chamber (32) having its outer periphery formed with plural heat dissipation grooves (33), the outer side of the main body is formed with plural wavelike shaped heat dissipation fins (34). With the aforementioned structure, advantages of smaller in volume, lighter in weight and more efficient in heat dissipation can be achieved.

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F21Y 2115/10 (2016.07 - EP US)

Citation (applicant)
• US 2010084116 A1 20100408 - CHEN SHYH-MING [TW]
• US 2011221324 A1 20110915 - LEE KE-CHIN [TW]
• US 2011215696 A1 20110908 - TONG TAO [US], et al
• US 7494249 B2 20090224 - LI JIA-HAO [TW]
• US 7744250 B2 20100629 - LEE TSUNG-LUNG [TW], et al
• US 7748876 B2 20100706 - ZHANG WEN-XIANG [CN], et al
• US 2010243211 A1 20100930 - MEYER IV GEORGE ANTHONY [US], et al

Citation (search report)
• [X] WO 2011028805 A2 20110310 - SAVENERGY INC [US], et al
• [X] EP 2180249 A1 20100428 - HYUNDAI TELECOMM CO LTD [KR]
• [I] US 2010141108 A1 20100610 - LIU TAY-JIAN [TW], et al
• [I] US 2009002995 A1 20090101 - LEE TSUNG-LUNG [TW], et al
• [I] US 2008007954 A1 20080110 - LI JIA-HAO [TW]
• [I] US 2010309671 A1 20101209 - MEYER IV GEORGE ANTHONY [US], et al

Cited by
FR3025294A1; EP3091278A4; CN110748864A

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