

Title (en)  
COOLING SYSTEM FOR INK CURING APPARATUS

Title (de)  
KÜHLSYSTEM FÜR DRUCKFARBENHÄRTUNGSVORRICHTUNG

Title (fr)  
SYSTÈME DE REFROIDISSEMENT POUR APPAREIL DE DURCISSEMENT D'ENCRE

Publication  
**EP 2089228 A1 20090819 (EN)**

Application  
**EP 07848421 A 20071130**

Priority  
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• GB 0624086 A 20061201

Abstract (en)  
[origin: GB2444328A] An ink curing apparatus has a fully self-contained cooling system. The apparatus comprises a single housing 10, in one end 12 of which is provided a lamp 14 and in the other end 22 of which is provided a fan 24. The apparatus has a path defined to direct air emitted from the lamp over cooled surfaces within the housing towards the fan. The apparatus also has a further path defined to direct air from the fan over cooled surfaces within the housing towards the lamp. Preferably, the cooled surfaces are cooled by water channelled through at least one pipe 26 within the housing, where the pipe(s) may include discrete inner and outer channels 26a, 26b. The cooled surfaces may include the surfaces of reflectors 16, 18 which partially surround the lamp. Preferably, the lamp directs ultraviolet (UV) light onto a substrate 20 so as to dry/cure the ink on the substrate. In use, hot air is cooled as it flows over the apparatus components whilst being circulated through the cooling system.

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