



**FIGURE 1** In two experiments, engineers lined up two sets of heat-generating devices and their heat sinks on a PCB in front of identical fans. The heat sinks differed only in their pin density—117 pins (a) and 61 pins (b). The densely configured heat sink contained substantially more surface area—167 versus 87 in.<sup>2</sup>—and, thus, showed a higher pressure drop.