## **Blade runner goes for gold at Paralympics**



Calf muscle begins to fire.

muscles provide locomotion

3. TAKE OFF:

quadriceps muscles must produce twice energy of able-bodied runner to fi

Blade

releases

a spring

energy like

Stored energy in blade moves to front edge

maximus

Foot pushes off

leg generates
over twice
energy
stored in
first
impact

Er

Energy <sup>∪</sup> loss in ankle

**RECORD COMPARISONS** 

Under 10% energy loss Time (seconds)

100m

9.69

10.91

10.78

Snug fit to leg
Foot: Carbon composite

Spikes

Socket:

 Competition
 400 metres
 200m

 2008 Olympic gold, men
 43.75
 19.30

 Pistorius's records
 46.25
 21.58

2008 Olympic gold, women **49.62 21.74** 

Sources: Ossur, IAAF Picture: Getty Images @ GRAPHIC NEWS