

Title (en)
SELF-CONTAINED ORAL CLEANING DEVICE

Title (de)
EIGENSTÄNDIGE MUNDHYGIENE-VORRICHTUNG

Title (fr)
DISPOSITIF D HYGIENE BUCCALE AUTONOME

Publication
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Application
EP 03729072 A 20030522

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• US 31573002 A 20021210

Abstract (en)
[origin: WO2004021958A1] In accordance with one embodiment of the present invention, an oral cleaning device (10) is provided with a nozzle (120) to jet a pressurized liquid. The oral cleaning device has a body (12), a neck (16) extending from the body (12) and a head (18) attached to the neck (16). The oral cleaning device (10) further includes a refillable reservoir (30) defined by the body (12) for holding a liquid. An on-board pump (14) is used to pressurize the liquid contained in the reservoir (30). The oral cleaning device (10) further includes a channel (108) from the reservoir (30) to the nozzle (120) in the head (18) such that when pressurized fluid in the reservoir (30) is released, the fluid jets from the oral cleaning device (10). The head and neck assembly is also interchangeable with other head and neck assemblies to provide different cleaning features. First, the nozzle (120) by itself to remove plaque and to simulate flossing between teeth. Second, the nozzle with bristles and the head shaped to brush teeth. Third, the nozzle with bristles and the head shaped to brush a tongue. Finally, a head defined to scrape a tongue.

IPC 8 full level
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Citation (search report)
• [A] GB 2269090 A 19940202 - FIRTH CHRISTOPHER [GB]
• [A] US 6039489 A 20000321 - HARMAN JAMES N [US], et al
• [A] DE 9304313 U1 19930708
• [A] US 5033961 A 19910723 - KANDLER HAROLD J [GB], et al
• [A] FR 2588469 A1 19870417 - LAMY PERRET EMILE [FR]
• See references of WO 2004021958A1

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