

Title (en)

CLOSED TUNNEL LINER, ESPECIALLY FOR UNDERGROUND GALLERIES

Publication

EP 0047897 B1 19840613 (DE)

Application

EP 81106719 A 19810828

Priority

DE 3032521 A 19800829

Abstract (en)

[origin: US4439065A] Thin, sheet metal elements with longitudinally arranged corrugations are used for a gallery construction. The cross-sectional form of the thin, metal sheets is wavy. The construction elements are easy to handle, and can be quickly assembled to provide a provisional gallery. Final assembly with anchoring stays or with supporting arches can subsequently take place under the protection of the provisional construction.

IPC 1-7

E21D 11/20

IPC 8 full level

E21D 11/00 (2006.01); **E21D 11/20** (2006.01)

CPC (source: EP US)

E21D 11/006 (2013.01 - EP US); **E21D 11/20** (2013.01 - EP US)

Cited by

CN112392504A

Designated contracting state (EPC)

BE GB LU SE

DOCDB simple family (publication)

EP 0047897 A1 19820324; **EP 0047897 B1 19840613**; DE 3032521 A1 19820311; DE 3032521 C2 19840927; US 4439065 A 19840327; ZA 816000 B 19820825

DOCDB simple family (application)

EP 81106719 A 19810828; DE 3032521 A 19800829; US 29760281 A 19810831; ZA 816000 A 19810828