Title (en)

PROCESS FOR PREPARING 3,5:4,6- PROTECTED DERIVATIVES OF L- OR D- GULONIC ACID, THEIR USE IN PREPARING 2- KETO-L- OR D-GULONIC ACID OR THEIR ESTERS OR L- OR D- ASCORBIC ACID, AND CERTAIN NOVEL 2-NITRATO-GULONATE INTERMEDIATES

Publication

**EP 0000243 B1 19810107 (EN)**

Application

**EP 78300017 A 19780605**

Priority

US 80588077 A 19770613

Abstract (en)

[origin: EP0000243A1] The invention relates to a process in which a 3,5:4,6-protected derivative of L- or D-glulonic acid is prepared by contecting L- or D-gulono-1,4-lactone with an aldehyde dialkyl acetal, or with an aldehyde and an alcohol, in the presence of an acid having a pKa of less than 3. This protected derivative may be oxidised and hydrolysed to 2-keto-L- or D-gulonic acid or ester thereof, which in turn may be hydrolysed to L- or D-ascorbic acid. L-ascorbic acid is of course Vitamin C. The invention also relates to the novel intermediates produced by the above processes.

IPC 1-7

**C07D 307/62**; C07H 7/02; C07H 9/04; C07D 493/04

IPC 8 full level

**C07D 307/62** (2006.01); **C07D 493/04** (2006.01); **C07H 7/02** (2006.01); **C07H 7/027** (2006.01); **C07H 9/04** (2006.01)

CPC (source: EP US)

**C07D 307/62** (2013.01 - EP US); **C07D 493/04** (2013.01 - EP US); **C07H 7/027** (2013.01 - EP US); **C07H 9/04** (2013.01 - EP US)

Cited by

EP3543244A1; WO2019179773A1; EP0148094A3; US4283340A; EP3543286A1; WO2019179774A1

Designated contracting state (EPC)

BE CH DE FR GB LU NL

DOCDB simple family (publication)

**EP 0000243 A1 19790110**; **EP 0000243 B1 19810107**; CA 1096397 A 19810224; DE 2860399 D1 19810226; DK 262178 A 19781214; IE 47197 B1 19840111; IE 781171 L 19781213; IT 1096711 B 19850826; IT 7824473 A0 19780612; JP S545917 A 19790117; JP S563357 B2 19810124; US 4232168 A 19801104

DOCDB simple family (application)

**EP 78300017 A 19780605**; CA 305179 A 19780609; DE 2860399 T 19780605; DK 262178 A 19780612; IE 117178 A 19780609; IT 2447378 A 19780612; JP 7070578 A 19780612; US 80588077 A 19770613